Founded in 1925 as Automotive Daily News

In Two Sections--Section One

Automotive News

The Newspaper of the Industry

Vol. 14, No. 2530 | DETROIT, SATURDAY, SEPTEMBER 10, 1938 | $4.00 Per Year, 10c Per Copy

AUGUST SALES CUT INVENTORIES

60,000 Recalled to Work on 1939 Models

Sparks

Primping for Previews
Publicist Pelletier
Only Yesterday
Juice-Box Fight

By
Chris Sinsabaugh

DRESS REHEARSAL for the big show of 1939 now is on. Assembly lines are going into action at the plants, field men are being brought in to run through their parts, often dealers come also. Two months from tomorrow, Sunday, the curtains will be drawn at Grand Central Palace in New York and the industry will start making new history.

Not the least important part of these preliminary goings on is the press preview circuit which began on Aug. 19 when the Chrysler Corp. took the Paul Prys and the Peeping Toms behind the scenes and showed them the new Plymouth, Dodge, Chrysler and De Soto—all at the same time.

* * *

NOW WE WHO write come to the second chapter with the Studebaker press party at South Bend today. And next week they come thick and fast, these press peeps. Graham is scheduled for Monday the 12th and on Wednesday the 14th Oldsmobile is host at Lansing. Pontiac has picked Friday the 16th and on Saturday the 17th the scribes jump to Lake Geneva, Wis., to look at the new Nash line—a busy week.

Packard has picked Monday the 19th for its display and Buick the 22nd. It hasn't been definitely settled but it is likely Hupmobile will be displayed at the Grosse Pointe Yacht club, Detroit. If not that date Hupp will go into the following week, to the 23rd. Hudson hasn't picked its date but it is expected to be in the last week of the month.

* * *

PLYMOUTH popping prematurely, although locally, started me digging as to what happened last fall in the way of formal announcements. Bear in mind the national show of 1937, when the '38 stuff was put on display, was held from Oct. 27 to Nov. 3; whereas this year the Palace event opens on a Friday, Nov. 11, and runs to the 18th. Therefore, this year's show comes two weeks later. Bearing this in mind, I'm giving you in the

(Continued on Page 15, Col. 1)

In This Issue

Coming Events ..... Page 14
Car Registrations ..... Page 12
Production This Week Page 12
Sales Through Service Page 6
Truck Registrations Page 12
Used Car Price Table Page 13

Further Gains Are Expected As Operations Rise

Several Lines Reach Final Assembly Stage During the Past Week

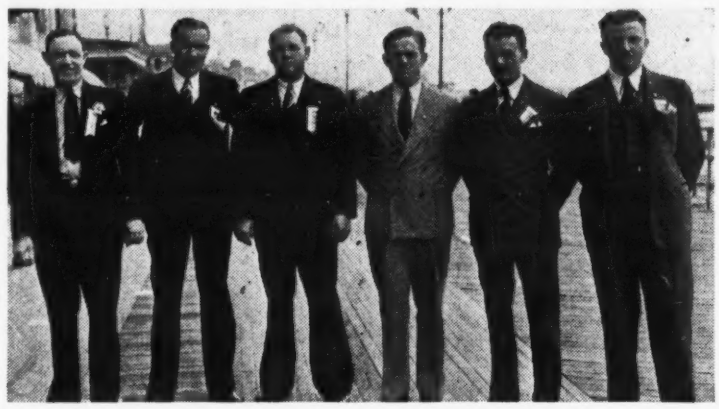
By Howard E. Hallas
Associate Editor, AN

DETROIT. — With more than 4,600 men newly returned to the job at the Pontiac plant, the number of automobile workers rehired as the result of stepped-up production in the industry by Friday had reached nearly the 60,000-mark, reports here indicate.

Pontiac is the most recent car producer to get into action on 1939 models. The number of men who returned to work Friday, however, are but a fraction of the payroll anticipated by Harry J. Klingler, general manager. "Dealers' new and used car stocks are the lowest they have been in five years", he declared.

While more than 40,000 of the men returned to work live in Detroit, indications point to a general rehiring throughout the industry. Fisher body plants in Cleveland this week recalled about 1,000 employes and plan to add another 1,000 within ten days.

Packard continued to accelerate its 1939 production, which it got underway two weeks ago, and Studebaker earlier in the week joined the list of manufacturers at work on new models. All Chrysler units, and Buick, which last week placed orders for 30,000 tons of steel, are producing new models.



EIGHT CONSISTENT WINNERS of Ford Service Merit Club honors were among the 300 Merit Club members from the eastern half of the United States who were guests of the Ford Motor Co. in Atlantic City last Thursday. Left to right, L. G. Carlisle, Pittsburgh branch; T. A. Corcoran and C. R. Roop, Chester branch; G. Apple, Indianapolis branch; Harold Brown and Morris Katz, both of the Edgewater branch. The two not present are C. Jacobs of Alexandria and Joseph Fitzhenry of St. Louis.

Willys Output Unhampered As Fire Sweeps Old Plant

TOLEDO.—Fire which raged through the unused portions of the old Willys-Overland plant here Thursday night, will not affect production plans of the present Willys-Overland Co., officials of the company stated late Friday. The blaze, which for a time threatened a huge section of Toledo's industrial area, was eventually confined to the older and unused portions of the Willys plant, which are now held by the Willys Real Estate Realization Corp.

The building destroyed was the real cradle of the present company and was built prior to 1900 by the Jewell Sewing Machine Co. In 1900 the property was acquired by the old Pope Motor Car Co. makers of the Pope Toledo car. When that company went into bankruptcy in 1909, the property was acquired by the late John N. Willys.

In the heydeys that followed, the properties were expanded into one of the largest industrial plants in the country.

When the present Willys-Overland company was organized a few years ago, the new management cut the costly balloon to the bone, using only the newer and most efficient units for production of the present lines of cars. The burned property was turned over to the Real Estate Realization Corp. for disposal.

Since that time the parts of the plant not used for automobile production, have become known as the incubator of industry, with more than a score small industries finding space there.

Cameron Assures 300 Ford Merit Men Of Business Gains Despite Panaceas

ATLANTIC CITY.—Assurance that this nation faces more prosperous times and a more whole some economic future was expressed here Thursday by W. J. Cameron, of the Ford Motor Co., who took several verbal jabs at political cure-alls and panaceas.

He spoke before more than 300 members of the Ford Service Merit Club, composed of winning service and parts managers from Ford dealerships throughout the eastern half of the country.

"We can all do more for the country by working at our jobs than we could do if we were members of Congress," said Cameron. "There is just one answer to this whole situation and that is work. The country will be saved—lifted out of the doldrums—not by roseate schemes, legislatively imaginable, otherwise impossible, but by those who believe in work. The country is slowly swinging to a more wholesome state of mind. What we need now is a lot more private thinking and a lot less public speaking.

The Top Ten

PASSENGER CARS

First Ten in Registration as Reported in AN Today:

1938 Pos.		Make	1937	Pos.
1—	281,034	Chev.	494,555—	2
2—	238,045	Ford	583,182—	1
3—	160,763	Plym.	317,691—	3
4—	94,312	Buick	127,372—	7
5—	63,618	Dge.	174,364—	4
6—	58,360	Pont.	142,004—	5
7—	55,186	Olds.	129,891—	6
8—	29,770	Pack.	67,511—	8
9—	29,339	Chrys.	57,658—	10
10—	24,368	Hud.	63,380—	9
Total All Makes				
1,136, 108			2,394,135	

For complete standings of all makes, see Page 12 this issue.

"Rich as we are," Cameron added, "this country has never produced enough for our people's needs. The answer to depression is production and work

That responsibility is on every one of us. There is no more patriotic service for any man than to continue the work he is doing today."

Cameron devoted the greater part of his time to a discussion of service as visualized by founder Henry Ford. In mentioning business conditions of today, Cameron said, "When I am asked, 'how is business?' I make this reply:

"'Business is worse than it has any right to be and better than most of us realize'."

Pointing out that service is the most important word in Ford history, Cameron told how Henry Ford as a youth displayed his ideals of service by devoting

(Continued on Page 2, Col. 5)

Decline of 30,000 Cars Shown in GM Sales Report

Plants Speed Up Operations to Supply 1939 Models Before Announcing

By William C. Callahan
Managing Editor, AN

DETROIT.—Further sharp reduction in dealer inventories of new cars in August is revealed in the General Motors sales reports for that period issued this week. General Motors sales by dealer to consumers were placed at 64,925 as against 34,752 sales by the corporation to dealers.

This is a decline in inventories for General Motors alone of 30,000 units, which would mean a reduction by the industry as a whole of close to 60,000 units.

Retail sales by GM dealers during August were down from July, however, but the rate of decline was less than seasonal. On the other hand, this shrinkage of sales was due no doubt to a shortage of faster moving body types in the most active markets.

This theory is borne out in the fact that Chevrolet, whose deal-

(Continued on Page 2, Col 1)

AMA Estimates Aug. Production At 91,300 Units

NEW YORK. — Factory sales of passenger cars and trucks in August are estimated by the Automobile Manufacturers Assn. at 91,300 units, which brings the total for the first eight months to 1,547,776.

Latest available information respecting domestic retail sales, on the other hand, reveals a July total of 189,894 units, bringing the aggregate for seven months to 1,368,259 units. This compares with 2,816,595 cars and trucks sold during the first seven months of last year.

Dealers' stocks of unsold new cars were reduced by a further 66,000 units during July, while the field inventory reduction during the first seven months of the year was 227,600 units, the AMA reported. Last year, during the corresponding interval, retail stocks increased by 126,100 units.

Retail distribution registered a slight advance in July compared with June, whereas the turn into the second half of 1937 was marked by a decline of some 21,800 unit deliveries to consumers.

July foreign sales of 26,986 units, compared with 38,145 in June, brought the seven-month total to 315,833 cars and trucks.

GM August Sales Report Shows Inventory Slash

Plants Speed '39 Operations To Stock Up Their Dealers

(Continued from Page 1)

er stocks were more nearly complete, exceeded its August projection of 38,000 new cars by selling 42,606 for the month. Chevrolet dealers also sold 107,593 used cars during the month.

Taken as a whole, dealer stocks of both new and used cars throughout the country today are lower than for many years past in a pre-announcement period. For this reason plant activity all down the lines has been stepped forward to insure ample supplies of 1939 cars before public showings. Pontiac's assembly line started this week with the hope of reaching 300 a day by next week. Packard lines also have resumed as well as Studebaker. Plymouth and Buick have already reached volume stage.

As a result of the improvement in automotive plants, it was reported this week that 56,000 names had been removed from the local relief rolls. Further improvement in the employment situation is expected before the end of the current month.

Reductions in GM output during August, due to shutdowns for models changeover, are reflected in the factory sales to dealers in the United States, which dropped to 34,752 in August against 61,826 in July. Sales to dealers in the U. S. last year totaled 157,000 for August.

Total sales by the corporation to dealers in the United States and Canada, plus overseas shipments for August were 55,431 against 90,030 in July and 188,010 in August 1937.

Sales to consumers for the calendar year to date by GM dealers were reported as 641,803 against 1,191,366 for the same period last year. Sales to dealers in the United States during the same period were reported as 516,226 against 1,224,057 last year. Sales to dealers in U. S. and Canada, plus overseas shipments to the end of August this year totaled 759,414 against 1,512,061 last year.

Dealers in K. C. Decide to Hold Show After All

KANSAS CITY.—The Kansas City Motor Car Dealers Assn. has voted to hold an automobile show in the new Municipal Auditorium, Nov. 26 to Dec. 3.

The decision, made after the dealer organization group had twice voted down the proposition, leaves only one major city—Omaha—which has so far not decided to hold a show this year.

Kansas City dealers have held a show here each year for more than a quarter of a century, but last spring decided the expense was too great and voted to discontinue the show. After this action the Kansas City chamber of commerce "got busy" and tried to induce the dealers to reconsider. Again the matter was brought up and the dealers again voted to hold no show.

Chamber officials and Kansas City city officials then took up the matter of co-operating with the dealers. The Chamber agreed to sponsor the show and take over some of the advertising and preliminary expense. The city officials voted to charge only a nominal fee for the use of the Municipal auditorium, one of the major expenses of the show being the rental on this huge building.

With this sort of co-operation offered, the factory organizations also decided to assist and the dealers voted to make it the "greatest show ever attempted here."

Ed F. Walsh jr., of Sam Clasen, will serve as a show committee for the retailers, while the wholesalers will be represented in making plans by R. C. Greenlease, president of Greenlease Motor Co.; W. L. Yule, Ford zone manager, and J. H. Wynn, of the Kansas City Chrysler Co. C. M. Woodard will be the show manager.

Show Abandoned

"Early introductions, and subsequent intermittent introductions, of new models so far in advance of our automobile show makes our appeal to the public to attend such an event a worthless endeavor.

"Therefore, the board of directors voted unanimously that an auto show would not be held this year."—Cincinnati Automobile Dealers Assn.; Harry T. Gardner, General Manager.

Fourth Dimension, a regular feature by Pete Wemhoff, offers news of automotive advertising.

Chevrolet Sales Of 42,606 Units Tops Aug. Quota

DETROIT.—Chevrolet dealers surpassed projected sales totals in both new and used cars for August, when 42,606 new cars and 107,593 used cars were sold nationally, according to William E. Holler, general sales manager.

"Market indications for new car sales during August projected approximately 38,000," said Holler, "but Chevrolet dealers exceeded that mark by nearly 5,000. In July they turned a market trend sharply against its normal course by selling 51,071 when projections indicated a possible 40,000 new car sales.

"Projections for used car sales for August indicated that it might be difficult for the Chevrolet dealers to exceed the 100,000 mark. The month's total of more than 107,000 keeps unblemished their astounding record, started 42 months ago of selling more than 100,000 used cars each month.

Notwithstanding the record established this summer in new car sales by the dealer organization used car stocks at the end of August were 17,000 less than at the same time last year, Holler said.

"A Word in Edgewise," a regular feature by George M. Slocum, offers a unique viewpoint from the motor world.

HINT OF BEAUTY behind motor executives is the new Buick for 1939 which this week was given its first spin over the Buick proving ground by W. S. Knudsen, president of General Motors Corp. Left to right: Albert Bradley, GM vice-president; O. W. Young, Buick's general manufacturing manager; Knudsen; Harlow H. Curtice, president, and C. A. Chayne, chief engineer of Buick.

Dodge's Silver Anniversary Models to Be Ready Soon

DETROIT. — Celebrating its twenty-fifth birthday, Dodge division of Chrysler Corp. will introduce within a few weeks its Silver Anniversary line of models for 1939.

During its quarter-century history, the company has built and sold close to four million passenger cars, trucks and commercial cars, and it is reliably reported that the forthcoming 1939 models—as yet seen only by privileged press previewers—will be distinguished by new and original styling, beauty of exterior line and interior appointment and by a number of mechanical features that mark distinct advances.

"Our dealers are clamoring for details of our new products for 1939, but even their curiosity cannot, at the moment, be rewarded with details of the new and different passenger cars we shall soon have ready for announcement," said F. H. Akers, Dodge vice-president and director of sales.

"We have every confidence, however, that when announcement time arrives—which will be quite soon—it will be agreed that our designers, engineers and craftsmen have appropriately created for our Silver Anniversary year a line of passenger cars that far surpasses in fundamental beauty, in smartness and excellence of mechanical and other appointment even our own best efforts in the past. We feel the occasion merits unusual observance—and we are satisfied that the 'stem-to-stern' newness of our 1939 cars will appropriately epitomize this desire for suitable celebration.

"I can partially lift the veil, perhaps, when I say that the new cars will be not only of strikingly new and graceful exterior design, but will be larger, roomier, and will incorporate many engineering and other features that make for even greater comfort, safety, ease of control and greater operating economy."

Modine Buys Plant of Belle City Mfg. Co.

RACINE, Wis.—Modine Mfg. Co. has purchased the Belle City Mfg. Co. property here, and the latter firm, in turn, has purchased the plant formerly occupied by the Ajax Tire Co.

The new Modine holdings are adjacent to the present plant, and plans call for the merging and improving of the two plants.

William L. Day Ex. GM Official Is Dead at 75

PONTIAC.—Funeral services were held here Friday for, William LaMotte Day, former president and general manager of the General Motors Truck Co. and a former vice-president and director of the General Motors Corp., who died Tuesday night in a hospital at Ann Arbor. He had been ill several weeks.

Mr. Day retired in 1924, after 12 years with GMTC.

Born in Moweaqua, Ill., 75 years ago, Mr. Day worked in his father's general store, then became a warehouse employe for the John Deere Plow Co. He rose to shipping and receiving clerk, and later joined a branch of International Harvester Co. as salesman. He served in Kansas City as assistant general manager of the plant.

He became general sales manager of the Mitchell Motor Co. in Racine, Wis., in 1911 and came here a year later as general manager of the General Motors Truck Co. He became president in 1915.

DISCUSSION OF SALES PLANS for 1939 was the keynote of the meeting in Detroit this week of Dodge dealers, regional managers, and factory heads. The contingent, part of which is shown, included 32 Dodge dealers, two from each region.

300 Ford Merit Men Hear Talk By Cameron

(Continued from Page 1)

great time and attention to worn out engines. Ford, according to Cameron, stayed out of the automobile manufacturing business for a year in order that he might talk to successful business men and learn how they operated their businesses from a service viewpoint. He always was interested in the car after he sold it, Cameron explained, and his entire life work has been built around such an ideal. Ford has attempted to produce a car of such quality that service is inbuilt, the speaker said.

Nineteen of the Ford Motor Co.'s 36 United States branches were represented, including those in Alexandria, Va.; Atlanta, Buffalo, Charlotte, North Carolina; Chester, Pa.; Cincinnati, Cleveland, Columbus, Ohio; Dearborn, Mich.; Edgewater, N. J.; Green Island, N. Y.; Indianapolis, Jacksonville, Louisville, Milwaukee, Norfolk, Pittsburgh, St. Louis and Somerville, Mass. Members of the Ford Service Merit Club listed by Ford branches who attended the Atlantic City meeting:

Members Are Listed

C. L. Carroll, J. S. May, J. N. List, A. J. Donnelly, M. U. Bowen, E. E. Ramsey, Guy S. Ritchie, R. Watkins, Guy Ramsey, J. Bowman, C. I. McDonald, C. Jacobs, R. H. Spencer, H. H. Robinson, H. A. Hinkle, S. F. Harner, T. C. Lancaster, L. H. Trumbo, B. Ware and V. J. Huff of Alexandria; George Murray, Carl A. Cosper, M. D. Ware, R. L. McGill, Ed. Young, Clyde Griggers, W. T. Wood, T. A. Eppert, C. E. Webster and A. G. White of Atlanta; Chas. Gosnell, E. B. McDonald, P. A. Ruddy, C. F. Thomas, Chester Meinzer, Howard West, Joseph Seawald, Jerome Mooney, Wm. Bickel and Francis Young of Buffalo; Vaughn Moore, M. P. Nicholson, E. W. Hartsell, Wray A. Plonk, L. J. Kirby, J. L. Bennett, T. F. Addison and Raymond McGill of Charlotte

Percy Haughey, Norman Clements, Melvin Martin, John Archer, Robt. Moore, Norman Doerr, Willard Wright, Linwood Hanson, Ed. Warfield, John Bowman, Ray Grove, Earl Matthews, P. J. Brogan, T. A. Corcoran, Bennett Bowers, Ike Stead, Geofi Ford, Paul Emberger, Frank Traub, Frank Miller, Wm. Myers, Wm. R. Davis, James O'Hara, M. Matheson, H. T. Runkle, C. R. Roop, Wm. Voth, E. Kempf, C. Bowers, J. Yeager, C. Brannan, Chas. Miller, L. Uleau, J. Edwards, Thos. Stewart, Ralph Kinch, John Staughton, Roy Schneck, J. Stratton and E. C. Jacobs of Chester; T. S. Loudon, Haydon Mastin, R. O. Halliburton, J. E. Harvey, Ed. Roe, Oscar Grubb, George Day and Lewis Wissell of Cincinnati; Orville Johnson, C. G. Dudenhoefer, Richard Porter, Dewey Amick, T. R. Scheuneman, Carl Mink, Robert Ehrnsberger and William Fischer of Cleveland.

James L. Cassell, Herman Kehl, Ray J. Billingsley, Charles F. Rayburn, Ed. Nicely, Lolis E. Haubeil, Willard B. Cole, Howard F. DeLong, Homer Lane Buckley, James Hamilton, Edwin B. Ellis, Willard D. Rice, Arthur S. Frank and Errett G. Beeney of Columbus; Fred Seabrook, Harry Cooper, Andrew Eberlein, Fred Fisher, Roy Boles, Earl Patterson, Cliff West, A. L. McDougle, Roe Betts and Al. Wood of Dearborn; Morris Katz, William Goldsmith, Rudolph Gebhart, William Karabec, Al. LaForge, Al. Katz, Harry Heitman, John J. McGee, Arthur Banham, C. H. Warner, Arthur Rasmussen, Marshall Long, George Hoeft, Harold Brown, V. Verratti, William Hung, Arthur Acken, George Powell, William Andrews and Jeffrey McCarthy of Edgewater.

Earl Steves, Willis Root, Charles F. Zink, Frank Connizzo, Roy Marino, Fletcher I. Potter, L. Foster James and Edward Ekerson of Green Island; D. C. Byers, Ralph Canter, F. J. Summers, John Tryon, G. Apple and Bert Wagner of Indianapolis; W. E. Dunning, C. G. Wheeler, H. Boyle, E. D. Britt, J. W. Gillette, Claude Holcomb, Dave Broadway, C. O. Ludwig, C. W. Strickland and Eddie Bland of Jacksonville; H. L. Grundy, John Logue, T. G. Fristoe, R. L. Hailey, A. B. Oliphant, J. N. Gribsby, G. York, W. O. Dougherty, E. Houchin and M. L. Cooper of Louisville; Harold Stiebs, Lester Post, Jack Zei, Fred Reince, Eugene Minor, Palmer Hanson, Herman Stanish and John Baker of Milwaukee.

L. S. Solomon, S. W. Peck, J. A. Butts, Clarence Bondurant, J. M. Sutherland, jr., H. D. Sweet, R. E. Pittman, L. B. Warren, V. A. Lynn and G. W. Covey jr. of Norfolk; Clarence Pyle, John McGrew, D. A. Rhine, A. R. Reitz, George Hoff, L. G. Wolfe, E. F. Carlisle, Kenneth Johnson, Russell Burris, J. J. Steffen, John Long and John Foshee of Pittsburgh; Harold F. Albin, M. E. Douglas, B. F. Dudenbostel, Sam Hunter, L. D. McLafferty, Carl Wachtel, Joseph Fitzhenry, W. W. Heath, J. M. Huie, L. E. Mathews, John M. Morris and Walter Schulz of St. Louis; Ernest Etling, Frank Howe, Wilfred Riley, Harold T. Ecklund, Robert Watson, Thos. Eagan, Frank Best, W. K. Savary, George Pope, C. L. Mhoon, G. L. Berndt, Smith Marshall, Walter Richardson and Brock Good of Somerville.

A similar group of Ford service and parts managers from Ford branches in the western part of the United States will meet in Colorado Springs, Colo., for a two-day frolic beginning Thursday, Sept. 15.

Press Preview Season Gets Into Full Swing

Studebaker Plays Host To Editors at South Bend

DETROIT.—Press preview season got into full swing this week-end with Studebaker at South Bend playing host to newspapermen from all sections of the country to show its new models for 1939. Next week Graham will entertain on Monday; Oldsmobile will follow Wednesday, with Pontiac scheduled for Friday and Nash Saturday. The following week will open with a press preview and dealer meeting at Packard on Monday, Sept. 19, and Buick will make its bow to the press Sept. 22. Under normal conditions public announcements follow press views by several weeks.

At South Bend Saturday, Paul G. Hoffman, Studebaker president was host to the newspaper fraternity. Glossing over the sales records of 1938 with the remark that Studebaker had suffered a decline in keeping with the industry as a whole, he cited the fact that the corporation on Sept. 16, will have completed 86 years operation without a serious labor disturbance. During 1938, he said, this close relationship between management and labor had resulted in a voluntary plan of spreading the work among employes with the result that throughout the year there has been no general layoff in the plant.

Practically the same force of men which started building 1938 cars are now employed building 1939 cars, he added. Proof of Hoffman's statements regarding friendly relationship with management and employes was the fact that Studebaker workers and the families had turned out en masse to inspect the new models on display at the plant.

"It is this spirit in our working force, plus the alertness of our engineering divisions, which give us confidence in the future," said Hoffman, proudly.

Turning to dealer problems, Hoffman discussed the maddened rush for legislation to control new and used car merchandising. This rush, he added, is subsiding, as witnessed by recent expression against government control by dealer associations in both Texas and Indiana. The Texas group by resolution flatly denounced further efforts in this direction while the Indiana group sought aid of factories to bring such drives to an end.

Legislation of this sort, Hoffman pointed out, will stifle initiative and eventually lead to some form of Fascism or communism, with the state in either case supreme and business and individuals regimented under control of government bureacracies.

Miller McClintock, director of the Bureau of Street Traffic Research at Yale was also a speaker at the press preview.

Aug. New Car Sales Hold Up Firm in Detroit

DETROIT.—New car sales in Wayne County (Detroit) during August showed a strong contra-seasonal firmness, the month's total of 1,870 units being almost identical with the 1,871 registered in July; whereas August, 1937, dropped off almost 50 per cent from July of that year, the figures being 8,519 and 16,007 units, respectively.

New truck registrations also shot upward during the month, August showing a total of 352 as against only 149 units in July of this year and 489 units in August, 1937.

Ford's 652 sales topped in the individual makes in the county for August, followed by Chevrolet's 385, Buick's 167, Plymouth 139, Dodge 98, Pontiac 58, Oldsmobile 56, Hudson 53, Packard 35, Chrysler 34, De Soto 32, Lincoln 30, La Salle 29, Nash 24, Hupmobile 18, Cadillac 16, Studebaker 13, Graham 10 and Willys 6.

Preview of '39 Oldsmobiles Will Attract 1,600 Persons

LANSING.—More than 1,600 persons, including General Motors executives, Oldsmobile factory officials, all Oldsmobile regional and zone managers and newspapermen from every section of the country will be guests of Oldsmobile for a series of special previews of the 1939 Oldsmobile offerings starting Sept. 12.

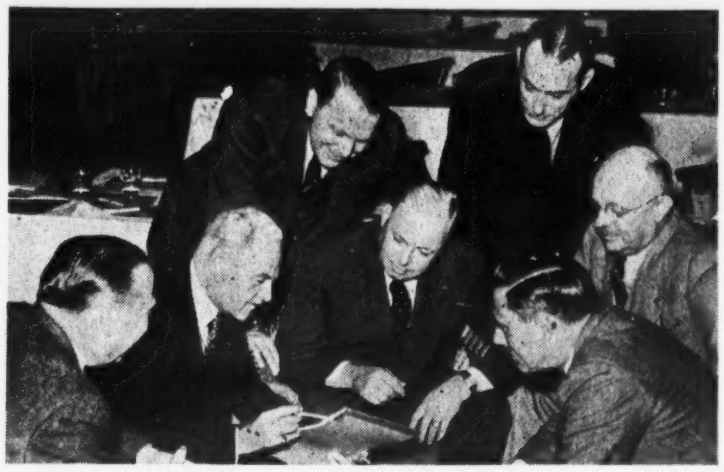
On Monday C. L. McCuen, general manager of Oldsmobile, will be host to GM executives and executives of other divisions of the corporation for the first pre-showing of the new Oldsmobiles. The meeting will be held in the auditorium of Oldsmobile's engineering building, where an interesting program has been arranged and luncheon will be served.

On Tuesday, Sept. 13, D. E. Ralston, general salesmanager for Oldsmobile, will preside at a meeting attended by all of the company's regional and zone managers. In addition to previewing the new cars this group will learn in detail of Oldsmobile's extensive merchandising plans for the coming year.

Over 300 will attend Oldsmobile's 1939 press party, according to V. C. Havens, advertising manager for Oldsmobile. Newspapermen from all sections will board the Oldsmobile Press Special train at the Michigan Central station in Detroit at 8:15 a. m. on Sept. 14. Oldsmobile will serve breakfast on the train, and the men will arrive in Lansing about 10:30 a. m. Following a brief program, the new cars will be shown to the press. An informal luncheon with factory officials will follow.

The Oldsmobile Press Special will leave Lansing about 3:00 p. m. and return the newsmen to Detroit about 5:00 p. m.

On Friday, Sept. 16, 800 Oldsmobile dealers and salesmen in the Detroit zone will preview the 1939 Oldsmobiles and hear details of one of the most elaborate programs ever sponsored by Oldsmobile. This is to be the first of a series of dealer meetings to be held throughout the country. The 1939 Oldsmobiles will be publicly announced late in October, according to Ralston.



NATIONAL LEADERS CONVENE. With 75 other winners, the leaders in Chevrolet's annual used car stock reduction campaign gathered in Detroit Wednesday and Thursday. More than 200,000 used car sales were made during the contest which extended from May 20 to July 20. Left to right, seven of the nine regional managers: H. K. Bragle, New England region; H. L. Horton, Atlantic Coast region; E. A. Nimnicht, Midwest region; R. F. Hicks, Eastern region; G. I. Smith (standing), Great Lakes region; R. W. Hill (seated in foreground) Southwestern region, and A. F. Young, Flint region.

Pontiac's Pre-Announcement Dealer Clinic Wins Praise

PONTIAC.—Pontiac's pre-announcement dealer merchandising clinic, held recently proved so satisfactory to dealers and factory executives alike that it may establish a precedent for the rest of the industry, according to H. J. Klingler, Pontiac general manager.

Klingler believes that this series of dealer-factory committee meetings marks the first time in the industry that a number of important dealers of a big company have been called into consultation to help decide the plans and policies for the announcement and merchandising of a new line of cars throughout the year.

"Sales executives at Pontiac feel that by this series of meetings the gap between factory and customer has been definitely closed," said Klingler, "by learning in clinical fashion the problems and views of important dealers far enough in advance of announcement time to act upon them.

Ventures Prediction

"This is putting dealer councils to the best possible immediate use," he continued. "Our pre-announcement clinic has worked. We have started something. It is the first time to my knowledge that dealer councils have been put to such a practical use, and I am willing to venture the prediction that our lead will be followed in years to come by other companies when they are making their plans for new models and new merchandising campaigns."

The idea of calling upon the advice and experience of successful dealers well ahead of new car announcement was inaugurated and worked out by C. P. Simpson, general sales manager of Pontiac.

Simpson selected the 34 dealers and appointed the committees. Dealers were placed upon the committees, where their particular experience would enable them to offer the best suggestions. In addition to the dealers named on the various committees, four zone managers were nominated to sit in on each committee deliberations as observers only.

General meetings of the entire group of 34 dealers, 22 zone managers, four regional managers, a selected group of district managers and factory executives and department heads, together with a preview of the new models, occupied the first day.

Submit Suggested Plans

The second day was given over to individual committee meetings. In these five committees, which covered the main merchandising subjects of advertising, sales promotion, service, parts and accessories, and used cars, all that the department heads did was to submit suggested plans in order to provide a basis for intelligent discussion.

In the main the plans were approved. But in a few cases some rearrangement and changes were suggested. In the case of advertising, for instance, a closer feeling between dealers' problems and copy treatment was obtained, with a number of additional copy themes suggested.

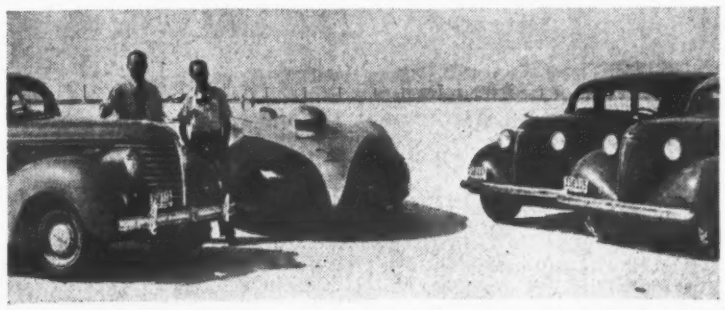
Valuable rearrangement of accessory groupings was another accomplishment. Modifications in the manner of handling service adjustments were agreed upon, and a proposed new service plan was accepted.

Agree Upon Plans

Plans for recruiting new salesmen, sales training, types of contests and prizes were agreed upon, while several good used car campaign ideas were worked out.

Following the separate committee meetings, the entire assemblage convened again to receive the report of the chairman of each committee with the committees' recommendations.

In receiving the committee suggestions and recommendations for Pontiac Motors, Simpson voiced the thanks of the company, praised the dealers for their exceptional co-operation and assured them that company executives would lose no time in putting many of the suggestions into immediate use.



ENGLISH SPEED KING, John Cobb (left), and Reid Railton, British automotive engineer and producer of Railton-Hudson cars, discuss the possibility of Cobb's success in his attack on the 347-mile-an-hour record. They are shown on the salt flats at Bonneville, Utah, with Cobb's Railton-designed racing machine, in which he plans an assault on Capt. Eyeston's new record Saturday.

Fatalities Off 19%

WASHINGTON.—Motor vehicle fatalities in 130 major cities during the first 34 weeks of 1938 totaled 4,909 compared with 6,039 for 1937, a decrease of 19 per cent, according to the U. S. bureau of the census. Deaths caused by motor vehicles in the 130 cities during the week ending Aug. 27, totaled 171, 25 fewer than in the corresponding week of last year.

5,000 to Attend '39 Buick Sales Meeting in Flint

FLINT.—More than 5,000 Buick dealers, salesmen and members of the factory field organization will assemble in Flint during the week of Sept. 15 for Buick's annual sales convention launching the 1939 model season.

According to W. F. Hufstader, general sales manager, the event will launch an ambitious sales program for the coming year, with indications that sales levels will reach new 1938 highs during the last quarter. Midsummer general business upturn, emphasized by strong trend of retail sales by dealers during the past two months, caused Buick to advance production of 1939 models 10 days, Hufstader said.

As a result, output now is in full swing and shipments are going forward to dealers in preparation for nationwide announcement of the new cars next month.

The executive said that the Flint convention will be attended by dealers from 18 zones covering the entire United States east of the Rocky Mountains, while a similar session will be held in Los Angeles for dealers and salesmen of the Pacific region.

The annual convention will open with a field organization meeting on Sept. 15, attended by executives and field personnel of the Buick factory sales organization, as well as General Motors central office officials. It will be followed by daily dealer meetings through Sept. 21 and will include the annual press preview of the 1939 models on Thursday, Sept. 22.

On the latter occasion more than 200 newsmen and magazine writers will assemble at the Buick factories to inspect the new cars and try them out. The press preview will precede public announcement of the new cars by about three weeks, Hufstader said.

Hufstader said he looks for a substantial increase in business for the industry as a whole next year. On a unit basis, he said, estimates place total volume for the industry at from 2,250,000 to 2,500,000 passenger cars next year.

The executive said the convention to be held in Los Angeles will carry the same 1939 sales program to the dealers of the West Coast, and will permit more dealers to attend than could otherwise journey to Flint.

Insurance Law Relief Seen by Mass. Motorists

BOSTON.—Massachusetts motorists and dealers may get a break next year in the proposed changing of the state compulsory insurance law, which holds up sales in the early part of the year because it costs from $80 up to put a small car on the road.

The legislature has passed a resolve directing the state insurance commissioner to make a survey of the possibilities of allowing insurance companies to reduce the premiums for drivers who have excellent safety records. For several years a bill to allow this to be done has been up for consideration but always was killed.

Hartford Sets Date

HARTFORD, Conn.—The annual Hartford automobile show will be held Nov. 3-10, sponsored by the Hartford Automobile Dealers Assn. It will be held at the State Armory on Broad street.

AN's Washington bureau supplies readers with all important happenings in the nation's capital, affecting the automotive and allied industries.

Founded in 1925 as Automotive Daily News

Automotive News

The Newspaper of the Industry

Published every Saturday at
DETROIT, U. S. A.
Cable Address—AUDANE, Detroit

Fifth Floor, New Center Building. Telephone Trinity 2-3500
New York—51 E. 42nd St. Murray Hill—6-0104 Washington—Chandler Bldg. National 4363 Chicago—307 N. Michigan Ave. Franklin 2568

Chris Sinsabaugh, Editor George M. Slocum, Publisher
B. B. Crighton, Business Manager; Willard R. Cotton, Advertising Manager; Wm. C. Callahan, Managing Editor; Bernard J. Wemhoff, Associate Editor; Howard E. Hallas, Associate Editor; Jack Weed, Editor Truck, Bus and Trailer Section; Edward Kruspak, Eastern Advertising Manager; Colin M. Selph, Special Representative.

RESIDENT CORRESPONDENTS

CHICAGO—Mel Adams
ATLANTA—J. H. Reed
MINNEAPOLIS—George Smedal
AKRON, O.—A. L. James
KANSAS CITY, MO.—H. H. James
LOS ANGELES—Slim Barnard
DALLAS, TEX.—J. A. Webb
SEATTLE, WASH.—D. M. Tropp
WASHINGTON—William Ullman
SAN FRANCISCO—Leon J. Pinkson and Al Waddell

Subscription ONE YEAR $4; TWO YEARS $6, including annual Almanac Edition, for United States and Canada, also Mexico, Cuba and Panama. To other countries, one year $6.00. Single copies 10¢. Advertising Rates: See Standard Rate and Data, or write for rate card. No Free List!

Entered as second-class matter Post Office, Detroit, under Act of March 3, 1879. Copyright 1938, Slocum Publishing Co. Printed in U. S. A.

AUTOMOTIVE DEALER MAKER NEWS

One sacred pledge we make our friends here and now. This publication, God willing and so long as it is in our charge, will never champion the cause of any individual or any corporation which is not for the best interests of the automotive industry as a whole. Nor will its columns be used to spread gossip or inflame prejudice. It will confine itself to the upbuilding of the industry it is pledged to serve, wholly through the dissemination of NEWS which is timely, authentic and of value.—(AN 6-10-1933).

SATURDAY, SEPTEMBER 10, 1938

In Rebuttal

IN a letter reproduced on this page Sam Shapiro, general manager of the Chicago Automobile Trade Assn., takes us to task for an editorial which appeared in this column Aug. 20., deploring our current national proneness to turn to legislation to cure our ills is—imaginary or real. Since others may have placed the same construction upon this editorial as Mr. Shapiro did perhaps its point was not clear and further explanation is in order.

The Automotive News editorial of that date was not directed against any particular law, or type of law. Rather it opposed the current mania for legislation which aims to cure business ills which result from competition, through the elimination of competition. This in our estimation can only be done at the expense of progress which also comes only from competition.

Elimination of competition is followed inevitably by loss of initiative, or (as has happened in Europe) the centering of initiative in one man, or dictator, from whom all inspiration flows. When business ethics are prescribed by law, inherent ethics are prone to fall to the level of maximum the law requires. For this reason more laws inevitably follow to bolster the weaknesses of the original law. And so on ad infinitum.

And in the usual run of events, taxes pyramid in direct ratio to the pyramiding of laws. Thus, we think, those who now seek laws to control are really those who are doing the dealers of America "a serious injustice".

What is Good?

SPEAKING before some 300 Ford Merit Men at Atlantic City this week, William J. Cameron, voice of Ford Motor Co., said: "Business is a lot worse than it has any right to be, and a lot better than most of us realize it is." This brings up the old question of: "What is a good year in the automobile business?"

Looking back over statistics for the industry for the past 15 years reveals quite clearly that such years as 1929 and 1937 belong definitely on the abnormal side of the ledger while years such as 1932 and 1938 are definitely on the subnormal side. Were it possible to squeeze our sale chart curves with equal pressure from top and bottom, it is likely that the straighten line would fall in the neighborhood of 3,000,000 cars annually. This of course, cannot be done unless it were also possible to fix our national income at a given point since the parallel between automobile production and national income is quite striking.

If we were to accept 3,000,000 as the mean line, even this bad year of 1938 would find us only 33 per cent down production rather close to 60 per cent down when we compare our standing with 1937. By the same token, well founded predictions for 1939 assure us a normal, if not an abnormal period, for that 12 months. The value of this broader view over the years is the point Mr. Cameron so well made at Atlantic City.

"—a word in edgewise"

By GEORGE M. SLOCUM

E. LEROY PELLETIER PASSES

I am glad Roy asked that his earthly remains be cremated. I wish his ashes might be scattered from a plane at 20,000 feet because the Roy we knew could not be buried. His soul, I am sure, always will retain the perspective of this world which he held during the long life he spent here.

* * *

WHEN I FIRST knew Roy, 30 years ago, he already was at the top of the advertising profession in America. He was as old in my eyes then as he was a few months ago when he sat across my desk and unfolded plans for his future with the optimism of a high school boy. Roy never grew old, even if his body did. When he spoke to me of "a little trouble my ticker is giving me," it was as casualy as if he were mentioning a spark plug in his motor which was missing now and then.

* * *

FROM THE FIRST day I heard of Roy Pelletier to the last, I envied him. First, for the adventure he had packed into his early years and later, (as I matured), that in the face of obstacles and discouragement he could pass them by as if they did not exist. Roy simply accepted trouble as an adventure that made his life more worth the living. No man ever talked to him who was not inspired by his brilliance or lifted by his buoyancy.

* * *

BORN A SON of a lumberman, just this side of the Canadian border, he naturally had been selected, as knowing the language of the northland, by one of the New York newspapers to cover "the rush to the Klondike". I think he always was most proud of the distinction of being a "sourdough" which, he told me, was a title won only by

those who had spent a winter in Alaska. He was a friend and confident of Rex Beach and inspired many of the latter's historical novels which captured the spirit of the gold rush and preserved it for posterity. Gradually, Roy drifted into the show business and was responsible for the promotion of the "Coney Islands" in America and the "Midway" at the Buffalo Exposition.

* * *

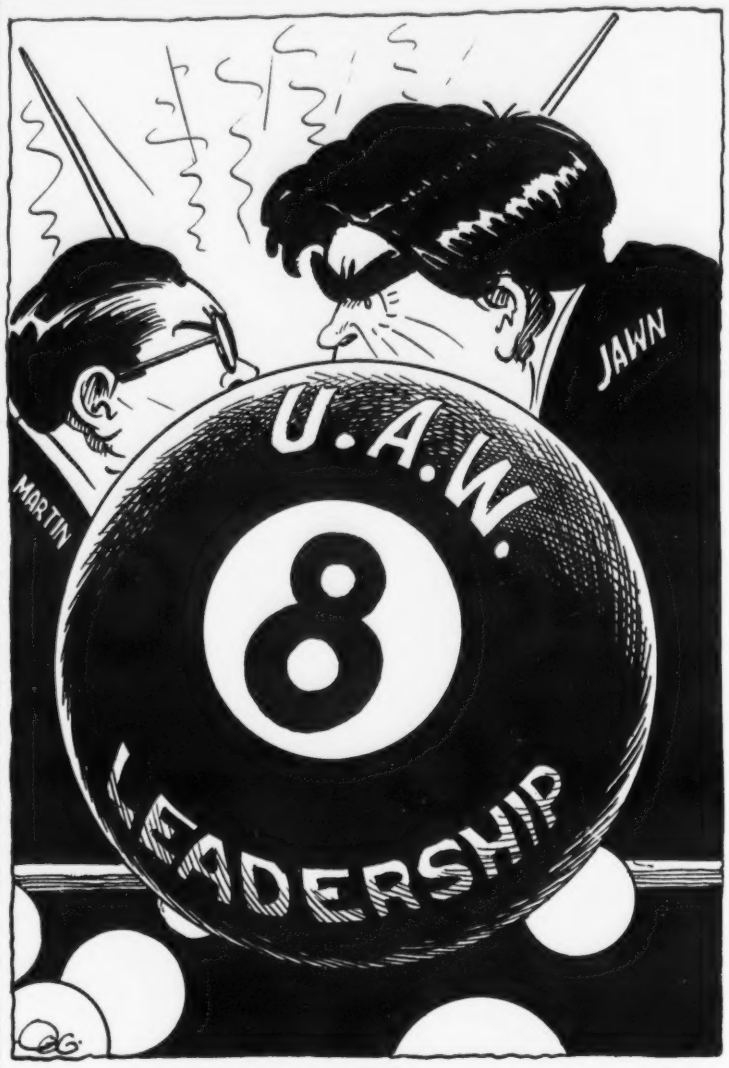
I DO NOT know just when he met Henry Ford or how, but that meeting was a fortunate one for both men because, while Henry was busy with the drafting board and the monkey wrench building a cheap means of transportation for the multitude, Roy Pelletier, (then his advertising and publicity manager) was promising even greater things for the little product which was just beginning to sell and Henry, being an honest manufacturer, was working tirelessly to keep up with Roy's promises.

* * *

NO HISTORY of the automobile business in America can be written without emblazoning the name of E. LeRoy Pelletier as one of its greatest publicists. Policies of sales promotion which Roy originated still are standard practice with every manufacturer. No one ever dreamed of a two-page spread advertisement until Roy telegraphed the copy for his famous "Stripped of all Verbiage" the longest advertisement that ever succeeded in moving a product!

* * *

WHEN ROY "retired" he made a parody of that word, as he leaped with fresh enthusiasm into the development of a great breeding farm near Pontiac. He always was just about half a generation ahead of the world he lived in and so today I think he is, somewhere out there, a Great Adventurer, impatiently waiting, as he always was, for a legion of "slow-poke" friends to catch up with him!—G. M. S.



Both Behind the Eight Ball

In This Corner--
'A Serious Injustice...'

The views expressed in this column are those of our readers. Anonymous contributions will not be accepted but confidence will be observed upon request.

Legislation

A serious injustice has been done to the automobile dealers of America by the editorial on resale price maintenance, labelled, "Hope Springs Eternal" in the Automotive News. In that article, with a few ironic words, you try to dispose of resale price maintenance as a possible aid to dealers and manufacturers alike.

I cannot help but feel in view of the responsible and reasonable quality of your many previous editorials, that the one on resale price maintenance is a lamentable accident, based as it apparently is, on a lack of understanding of the possibilities inherent in resale price maintenance as applied to retail distribution in the automobile industry.

It was only after the most careful research that the Chicago Automobile Trade Assn. took a foremost part in urging automobile manufacturers to utilize *existing* fair trade laws and the national Miller-Tydings Act, and we believe that the National Automobile Dealers Assn. is doing a most commendable job in promoting resale price maintenance.

You indicate in your editorial that you believe that resale price maintenance will mean a further pyramiding of laws, i.e., that it is necessary to pass more laws to secure fair trade practice contracts. We would like to point out that 43 states have fair trade laws at the *present* time and the Miller-Tydings Act is not something to be passed, but a law that was passed during the 1937 congressional session. There is no need for further legislation.

Through practical contractual arrangements, resale price maintenance provides protection for the automobile dealer against unhealthy practices,

If you are interested, I would be glad to send you a detailed memorandum outlining the subject of resale price maintenance, so as to make clear that the idea which has been applied by other groups is perfectly sensible, plausible and practicable.—Sam Shapiro, general manager, Chicago Automobile Trade Assn., Chicago, Ill.

War

Replying to your broadcast query in your Word in Edgewise, "Why does a potential war in Europe run our stocks down." Isn't it because another war means the end of civilization over there — not merely one more war? Further, neither Germany, Italy nor other nations has cash or credit of 1914 to buy United States goods as they did then. Hence—war would not give us business we had in '14.

Furthermore—there ain't going to be any war because Germany has no reserve cash, credit, etc., to last over 90 days. It's all a good scare—no more. The outlook is good for Americans who have some nerve and sense—just as you well say.—Ed Babcox, Tire Review, Akron, C.

Small news, too, can help sell Goodyears ↓↓

Take last week's TIME, now—just that one issue. You'll come on the damnedest things:

The Tower of London's watered-beer crime

A clock with a hand that revolves once in 26,000 years

Dream books and bets

A nickel subway slug that cost the State of New York $2,100

A new mad fad imported by No. 1 U. S. dancing teacher

Oregon's mislaid $22,000 meteor

A bird bath off a statue's head

New York's and Trinidad's Calypso boom

An airmail bid (accepted) of $0.00 per mile

Who'd ever suspect these odd bits of human news could help sell Goodyear Double Eagles and LifeGuards, oranges and best-sellers?

But they do. For TIME has proved itself an extraordinary advertising medium for anything that sells to a quality market—and these things help TIME be TIME.

For TIME is more than the big news. The big news is all there, sure. News is tremendous these days; the cables and wires throb with it; TIME hums with it, every issue. No song of sixpence is it either—millions of dollars and millions of men move through it.

But TIME is written for a special kind of reader—alert, intelligent enough to want basic news of those millions—*and* imaginative enough to have endless zest and curiosity for sidelights about any single human life.

Such readers have come to feel that in no other single place can they find, at once, the immense and the small, the sweep of the great news and the trickle of colorful incident.

So 700,000 intelligent, successful U. S. families read TIME every week of the year.

So far, so good—here's an audience of special readers, responsive to interesting things, eager for news about any aspect of life. Any advertiser feels in his bones that lively minds make live prospects. You feel it, don't you?

And, money-wise, profit-wise, the beauty of it is that TIME's audience is made up of prospects *who can buy*. Forget statistics—consult your bones again. You know that people who can and do spend five dollars a year for their favorite magazine are people who buy what they want. And TIME has the largest collection of them in the world.

↓↓↓↓

But if you insist on slide-rules and proofs, statistics are all over the place at TIME. Ten dozen different surveys can prove to you that TIME's 700,000 are largely professional or business people, with stability far above the mass average. So far above, that year out, year in they make a SECURITY BASE for any advertiser of things that intelligent, successful people want. You can count on TIME's market.

And counting the cost of reaching that market—where every prospect pleases because every one can buy—won't dismay you either.

A TIME page costs less than $2500; thirteen pages cost $30,550; twenty-six cost $57,850.

Could you use a SECURITY BASE in your own business?

TIME ★ THE WEEKLY NEWSMAGAZINE ★

TIME
The Weekly Newsmagazine

—more $ $ $ for Dealers!

Sales Through Service

—more $ $ $ for Dealers!

Personalized Follow-Up Boosts Service Profits

N. C. Dealer's Labor Sales Show 21% Gain Over 1937

Special to Automotive News

CHARLESTON, N. C.—Regular, specific, personalized service follow-up; courteous attention to every owner's needs; accurate diagnosis of mechanical troubles and satisfactory workmanship are among the chief attributes of any dealer's success, according to Ray Waites, manager of Bennett's, Inc., Pontiac dealer here.

Bennett's, Inc., has demonstrated the effectiveness of these principles by showing material gains in the profit end of its service business this year compared to 1937.

During the first five months of 1938, customer labor sales showed a gain of 21 per cent over the same period the year before; parts sales gained 15 per cent, while accessories sales went ahead 35 per cent. The dealership made a gain of almost 1 per cent in price class for Pontiac new car sales for the period.

Service manager and all mechanics are Charlestonians who have been employes of Bennett's for many years. All are members of the Pontiac Service Craftsman's Guild, and all have a wide acquaintance in the community.

Equipment is modern in every respect and includes a high-pressure lubrication department with a trained operator. The department is provided with the standard Pontiac background, awnings and painted floors. There is a customers' waiting room.

There is a motor analyzation and safety testing department; complete body and wreck service; wheel-aligning and brake service, and washing and polishing, in addition to the regular mechanical service equipment.

Schools Are Held

Mechanics are trained and kept up-to-date by periodical service Craftsman's Guild examinations, organization meetings and service schools. All employes are stimulated by bonuses. At the monthly organization meetings, service bulletins are covered and discussion of problems is encouraged. Cleanliness is insisted upon at all times.

Follow-up of service customers never is neglected in the Bennett organization. It is regular and not spasmodic. Jiffy folders and file provide a complete record of each owner. Service follow-up is not generalized, but is specific for each owner and is planned to appeal to the individual needs of each.

Personalized messages are used by the service manager on all telephone contacts with owners. Postcards and letters also are employed. Special service sales are held periodically throughout the year, and all salesmen solicit service business.

Pontiac Service Saver Plan Books are sold to every owner with his new car, thus assuring six contacts for lubrication service. They provide the original service contacts. As soon as a Service Saver book is used up, the owner is asked to buy a new one, and all members of the service department are paid a 50-cent bonus for each Service Saver book sale.

Delivers Cars Personally

The Charleston Pontiac dealer puts a great deal of emphasis upon convincing his owners of the necessity of regular maintenance service at the time of delivery of the new car. The service manager meets every new car buyer and personally delivers the car after explaining the warranty and the service requirements of the car.

All customers are urged to have regular free checks made in the motor and safety testing department. The equipment is placed where owners can observe its use, and the tests are all explained so that they will realize the necessity of the service work recommended. There is no attempt at oversselling.

Bennett's has profited by adhering to the policy that the customer should be convinced of the value of regular service at the time he gets his car, and then should be followed regularly at stated intervals with personalized messages that cover his own special requirements.

Quaint Quirks That Build Business

Nolan-Swanson Motor Co., new Dodge-Plymouth dealers for Cheyenne, reports an increase in used car sales since inaugurating an advertising campaign, featuring a **comic strip** based on the adventures of a used car owner.

* * *

The John Opitz Chevrolet Co., of Omaha, has been keeping its used car salesmen busy since announcing that **out-of-town** customers living within a radius of 300 miles of Omaha would have their fare to Omaha (based on one-way bus fare) refunded if they purchased a used car or truck from the company. In addition to free bus fare, the Omaha dealer is filling the gas tank free of charge to get its out-state customers back home again. The free transportation policy is advertised in the "rube" editions of the Omaha dailies.

* * *

Nebraska automobile dealers made a real selling asset of the agitation that resulted from the inauguration of the brake and light **testing** requirements.

Lincoln dealers featured used cars bearing the state's safety stickers at the state fair. A $250,000 offering of reconditioned cars confronted visitors from out of the city. It was reported that almost the entire list was disposed of before the close of the fair.

The Lincoln association combined to make the sale possible. Banners were displayed on the city sales rooms and the exhibits at the fair grounds were well advertised.

Reconditioned cars, bearing state safety stickers, were also featured in Omaha, Norfolk, and Hastings.

* * *

W. E. Dinneen, Inc., (De Soto-Plymouth) Cheyenne, Wyo., recently introduced something new for Cheyenne motorists and the only man in Wyoming so qualified in the person of Roy Palmer, who was sent to the Carter training school where he received his diploma as a factory-trained carburetor service man.

Announcing this addition to its service department, the Dinneen company ran a three-page ad in the local newspapers showing a reproduction of the diploma, and calling attention to the fact Dinneen's had the only man in the state qualified as a certified, factory trained Carter carburetor service man.

FIRST ORGANIZATION MEETING of Buick's 1939 campaign was held Wednesday in Flint, with C. W. Jacobs, parts and service manager, host to the Buick field service organization. Two-day session covered the 1939 program, was climaxed by the annual service department banquet at which Harlow H. Curtice, president, and W. F. Hufstader, general sales manager, were principal speakers. Left to right, O. W. Young, general manufacturing manager, Curtice, Jacobs and Hufstader.

Let's Run a Contest

Editor's Note: Proper and adequate rules are one of the most important phases of any contest. This week's article gives the proper basis for setting up rules and reflects the experience gained by sponsors from successful campaigns.

A contest is no better than its rules. The major questions every sponsor must ask himself, after the need for a contest is felt, are how long shall my contest run and how much shall I allow for various accomplishments.

Length of contest. A careful analysis of a great many campaigns shows that those of two to three months' duration procured the best results. Those of shorter duration do not give the men time to really get into the swing of things, while those lasting longer than three months can not keep interest sustained to the proper pitch.

Basis of Awards

Reward for accomplishment. When the reward is inadequate, the participants in the campaign generally take no interest and have a pessimistic attitude toward all future campaigns. Awards should be given depending upon the type of participant, his income, and the extra effort expected of him. Also, since conditions and potentials vary, the basis of awards should vary accordingly, and meet conditions as they exist when and where the campaign is conducted.

Recently two sales divisions of one automobile manufacturer conducted used car contests, with the starting dates at different times and the awards given by the one division were 250% higher than the awards given by the other. The reason was that the used car potential in the one division at the start of the contest was less than the potential existing in the other division when that contest started. Both campaigns were successful. Each division felt that it had awarded the dealers' salesmen in proportion to the task they had to do.

Range of Awards

Experience gathered, however, from investigations of more than 100 campaigns conducted throughout the country indicates that the more liberal the rewards the better the results. In successful automobile campaigns, the value of the awards have ranged from a minimum of $2.50 per used car to a maximum of $50 per new car.

Participants. Salesmangers should participate with salesmen in awards offered. Frequently this is done by awarding a fixed percentage (generally 10 per cent to 25 per cent) of all the salesmen's winnings under the salesmanager's direction, to him. Another method is to award the salesmanager his selection from a special group of prizes when the quota set for the dealer is reached.

Demonstrations and appraisals. It is an accepted fact that where salesmen increase their daily average of demonstrations and appraisals, an increased volume of sales will result. An allowance valued from 25 cents to 50 cents can be given for each bonafide demonstration, with double this value for each appraisal made. Of course, the allowance made for each demonstration and appraisal in itself is small, but a good number of demonstrations and appraisals over a two or three-month period will give a salesman a really worthwhile prize. Needless to say, this should be limited to approximately three demonstrations or three appraisals to each sale.

Required to Sell

New cars. New car awards should vary according to the price class of the car and the effort required to sell the higher-priced model or a model the sponsor is particularly desirous to get moving. For instance, as high as $50 hsa been spent for merchandise awarded for the sale of certain new cars in the luxury class; while in the lower-priced field awards costing $3 to $8 per car are the accepted basis. Many manufacturers and dealers avoid a costly clean-up problem by starting a campaign to end when the clean-up problem usually faces them, while others run campaigns to get orders for their new models in that lapse of time usually occurring between the clean-up and new car announcement. Both types of campaign have in most instances produced the desired results. Since the effort required in both instances is greater than exists during normal selling seasons the awards offered are usually more valuable.

Used cars. Since the need for disposal of higher-priced used cars is paramount, a premium should be placed on cars of 1936, 1937 and 1938 vintage. These higher-priced used cars generally tend to remain in the dealer's stock for a greater length of time than the older and less expensive used cars. Placing of this premium can be accomplished by a larger allowance on used cars in stock over 60 or 90 days, or by graduating the rewards for the sale of a used car in proportion to its selling price.

(Continued on Page 7, Col. 1)

Volume Boosted By Aggressive Merchandising

Special to Automotive News

PALMYRA, Neb.—The Palmyra Auto Co. (Ford) keeps the Palmyra vicinity Ford "conscious" and, incidentally, sells more Fords in the community than do the dealers of all other represented makes of cars combined, through an aggressive merchandising policy which includes maintaining an up-to-date service department, personal calls on all prospects, and, a column run in the local weekly newspaper under the heading, "The Ford Exhaust."

This column is one of the most-read features of the paper, combining as it does local news and names with quaint humor.

"Oh-hum, wish we could write something different this week," began a recent column, "but we get as fed-up writing about used cars as you do reading about them. But as long as we remain in this business we'll keep getting them, and we hope the public keeps their confidence in this 'joint' so that they keep buying them.

"We sold a good many this week, looked around and said 'that's a good job' on last Saturday, and then five days later, when we were writing this dang copy, if there wasn't lot more of nice used cars on hand taken in on New V-8's we sold to satisfied customers. And are these used cars clean?? Believe me we have as clean and nice a line of used cars as you ever laid your 'peepers' on. So-o-o-o if you want to see and drive some real used (not abused) cars drop in. And bless my soul if every dang one of them but one didn't come from old customers and are cars we sold right out of this 'shebang' so we know they're Good."

The "Ford Exhaust" also has its jokes, and likewise lists the names of purchasers of cars for the week, both new and used, and "blows up" the Palmyra Auto Co.'s service department.

Transportation Conclave Draws Motor Leaders

WASHINGTON.—Among the approximately 50 outstanding representatives of transportation, shipper, and financial interests who will participate in the transportation conference to be held here September 14-15 under the auspices of the Chamber of Commerce of the United States are several men who are well known in the automotive field. They include Ted V. Rodgers, president of the American Trucking Associations; Chester H. Gray, director, National Highway Users Conference; Arthur M. Hill, Atlantic Greyhound Corp., Charleston, W. Va.; and H. D. Horton, president, Horton Motor Lines, Charlotte, N. C.

According to the Chamber, the conference will endeavor to work out a co-ordinated transportation program, in which the viewpoints of all interested groups will be harmonized, and which then will be submitted to Congress for appropriate legislative action at the forthcoming session. Among the interests to be represented are bus and truck companies, railroads, intercoastal, coastwise, and inland water lines and air transport operators.

Industry's Leaders to Aid Management Congress

World Convention Set For Washington Sept. 19

NEW YORK.—Prominent members of the rubber and automobile industries are aiding in the preparation of the program for the Seventh International Management Congress, the first to be held in America, at Washington, D. C., from Sept. 19 to 23.

Financial and industrial leaders and management authorities from some 40 countries will exchange information on the solution of industrial problems and dramatize before a wide public what management is doing and planning in the interests of social and economic progress. About 2,000 Americans and some 300 from other countries are expected to attend.

Representatives of rubber and automobile interests serving on the advisory council of the coming Congress are: Charles F. Kettering, vice-president, research laboratories division, General Motors Corp.; Paul W. Litchfield, president, Goodyear Tire & Rubber Co.; W. Ledyard Mitchell, vice-president and chairman export division, Chrysler Corp.; James D. Mooney, GM vice-president; and Alfred P. Sloan jr. GM chairman.

More than 200 papers on a wide range of subjects relating to administration, production, distribution, personnel, agriculture, and the home have been printed before the opening of the sessions and will serve as discussion stimulants. Among those contributing and their subjects are: C. E. Bleicher, DeSoto, "Planning the Processes and Equipment for Manufacture and Budgeting for Equipment Replacement"; W. J. Cameron, Ford Motor Co., "The Decentralization of Industry"; and Edgar W. Smith, GM, "Decentralizing the Operating Organization".

Francis B. Davis jr., chairman, United States Rubber Co., and Mooney, are heading up the rubber and automotive groups on the Congress commerce and industry committee, of which Lewis H. Brown, president, Johns-Mansville Corp., is chairman.

The Congress sponsoring group is the International Committee of Scientific Management, of which Viscount Leverhulme of Great Britain is president. Active promotion in the United States of the Congress is being carried on by a co-oordinating committee headed by William L. Batt, president of S. K. F. Industries, Inc.

NWRA Sets Conclave

DETROIT.—The National Wheel & Rim Assn. will hold its annual convention at the Morrison hotel, Chicago, Dec. 8-9.

Pittsburgh Extends Run Of '38 Show to 8 Days

PITTSBURGH.—Heavily identified with the current "National Salesmen's Crusade," the Pittsburgh Automobile Dealers Assn. is taking every advantage of the present movement to stimulate business and at a recent meeting of the board of directors decided to lengthen the 1938 automobile show, previously announced for Nov. 11, to Nov. 18.

The show, the directors decided, will now continue through Nov. 19, giving Pittsburgh exhibitors eight full days instead of seven.

The show committee has planned a number of innovations this year, principally the "Armistice Day Antique Car Derby," which will be conducted under the direction of Geo. P. Gray, past president of the association. Entries will be received from throughout the Tri-State area for cars made prior to Nov. 11, 1918. The association has set up worthwhile cash prizes, and distributors, tire, gas and accessory companies are also setting up valuable prizes. The derby will be conducted in co-operation with the Automobile Club of Pittsburgh and the Pittsburgh Motor Club.

The cars will be required to operate under their own power and will be judged Armistice Day morning, after which a parade will be held to Motor Square Garden, when the show will open officially.

Let's Run A Contest

(Continued from Page 6)

By these methods those cars, which all salesmen try first to sell because of a readier market, will be carrying only an equal burden of the contest expense. The "easy to sell" cars would possibly be moved anyway, so by placing particular emphasis on the cars more difficult to move, the real purpose of the contest, i.e., of putting more working capital into the hands of the dealers, is accomplished.

Accessories. A plan which has worked successfully is to give an extra award when a car is sold with radio, heater, or other extra equipment. This encourages the salesman to seek the additional revenue which the purchaser may give to a local accessory house or even a competitive firm. Since the margin of profit on such accessories is greater than that on a car, it is the practice to allow a larger percentage of the selling price toward the awards offered. Often a salesman knows that extra equipment means bigger commissions, but it takes a special activity, such as a contest, to make him realize this point and put what he knows into effect.

Parts and service. Parts and service departments have proved that they can be real money-makers for dealers where properly organized and efficiently managed; and factory sponsored contests have brought more of this desirable business to many dealers who previously overlooked the possibilities this department provided for extra profit. Awards may be given to parts and service managers and other employes, based on parts and service sales over a fair contest quota.

Receivables. One manufacturer recently stated that, while dealers' used car inventories were tying up a great amount of working capital, this inventory figure was exceeded by the capital remaining inactive through stagnant receivables. They conducted a merchandise prize campaign, and bookkeepers and accountants were given prizes for attaining an accounts receivable reduction quota. Awards were also given for each $100 of accounts receivable reduction, regardless of quota.

The rules of the contest should embody its aim and purpose. If the rules do not clearly state what the contest intends to do for those participating, a great deal of its effectiveness is lost.

Next week's article will tell about some important underlying factors entering into any contest, as these can make it either successful or unsuccessful.

WHO BUYS NEW CARS?

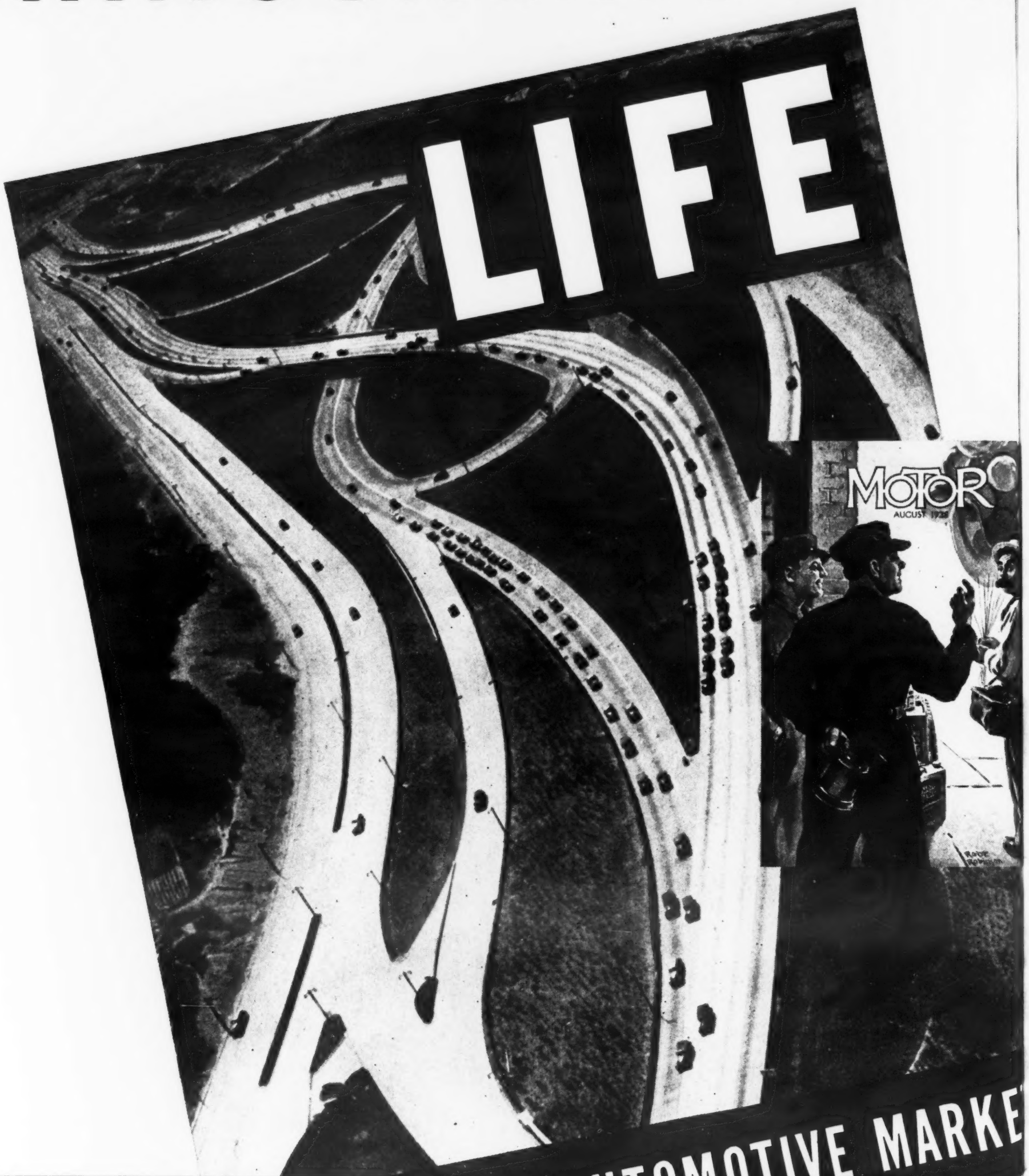
Advertise at random and you are sure to get a *few* buyers. But advertise in FORTUNE and you reach a concentrated group of people who spend money . . . on automobiles, tires or whatever you sell.

★ First facts discovered in a comprehensive survey made among FORTUNE subscribers June, 1938.

Fortune means Business

TIME & LIFE BUILDING, ROCKEFELLER CENTER, NEW YORK CITY

ANNOUNCING . . . A



RS THE AUTOMOTIVE MARKE

To a list of CAR DEALERS handling twelve different makes of automobiles was sent a card asking:

"In which of these magazines are you most likely to read what's on every page, including the advertisements?"

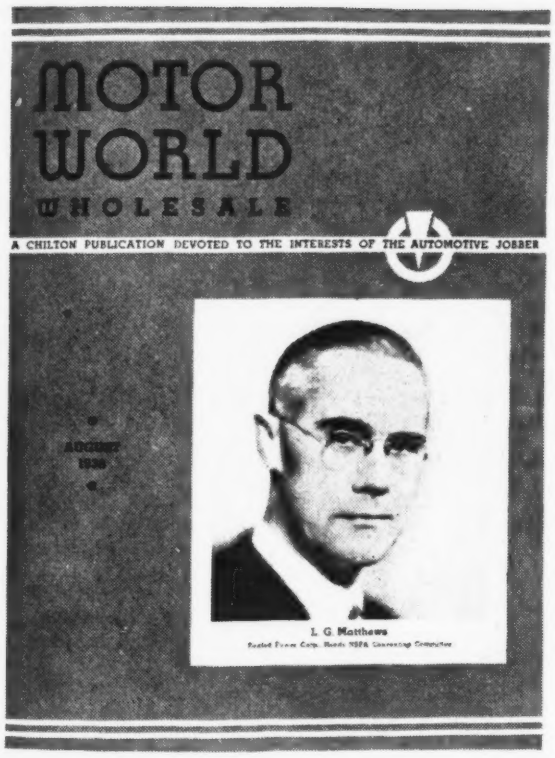
2,384 MEN VOTED:

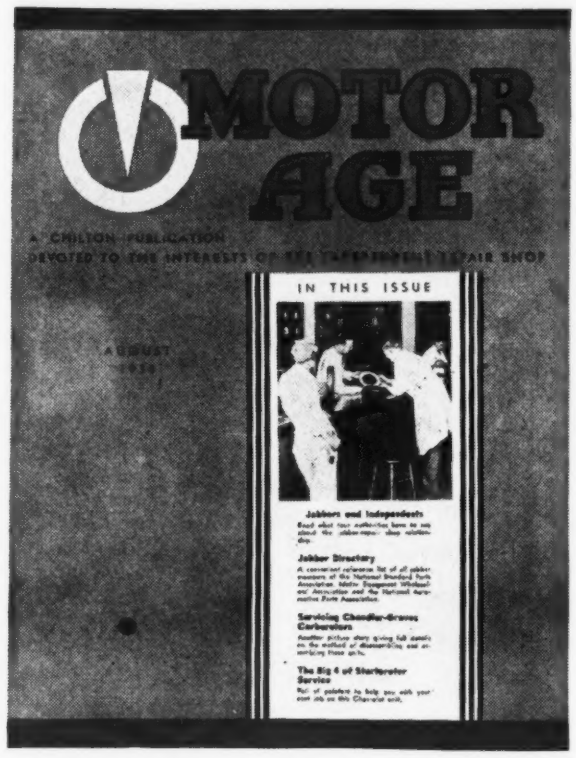
LIFE	1,076
Satevepost	1,008
Collier's	476
Liberty	350

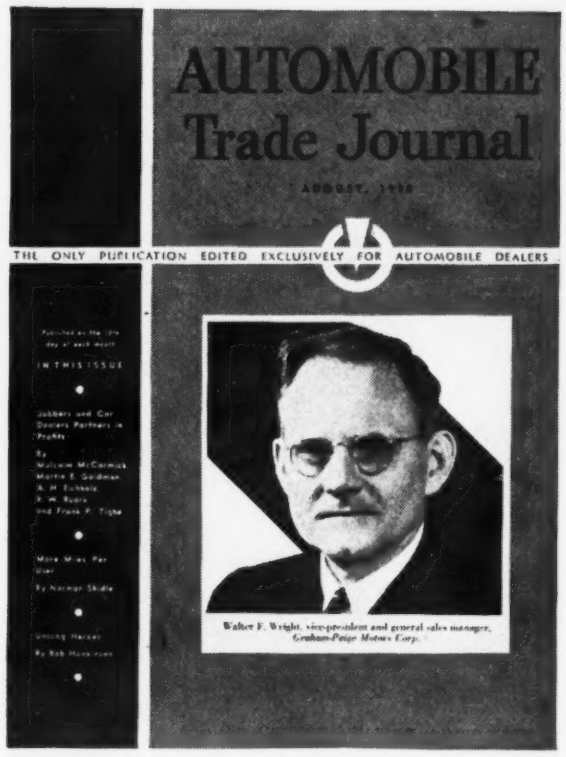
THE GREATEST NE

NEW MONTHLY SERVICE TO LIFE'S AUTOMOTIVE ADVERTISERS

Beginning in the SEPTEMBER issue of Motor, Automobile Trade Journal, Motor Age, and Motor World Wholesale. LIFE launches the largest publisher campaign in a decade in the automotive trade press—a series of multiple-page insert advertisements.







LIFE's campaign in the auto trades will merchandise the automotive advertising in LIFE. It will tie the LIFE FORCE closely and individually to each of LIFE's automotive advertisers. It will call the attention of the entire trade to the advertising done in LIFE by these companies and products. This special schedule will be an addition to LIFE's regular merchandising program. The large circulation (over 110,000) which LIFE obtains in these four publications will be supplemented by a merchandising mailing to at least 15,000 of the leading dealers, jobbers, service and repair men in the automotive industry.

SELLING FORCE IN A DECADE

Scripps-Howard Survey Shows Backlog Demand

Study Made in 16 Cities Covers 53,124 Families

DETROIT.—A strong desire to buy both new and used cars in profitable quantities is indicated in the automotive section of the Scripps-Howard 16-City Home Inventory Survey, which is being released in book form this week.

The study covers car ownership, replacement choices and other material of a similar character on the part of 53,124 families in Buffalo, Pittsburgh, Washington, Cleveland, Cincinnati, Akron, Toledo, Columbus, Indianapolis, Evansville, Birmingham, Knoxville, Fort Worth, Houston, San Diego, and San Francisco.

Of the 53,124 families, 68.4 per cent, or 36,369 families, report the ownership of 40,428 automobiles, new and used. The division between these two is 61.3 per cent reported as bought new and 38.7 per cent bought used.

Made during the last three months of 1937 in answer to the question—"When do you expect to be in the market for a new car?" — those who owned new cars indicated that 40.3 per cent would like to have bought a car in 1938 and 26.1 per cent put their purchase time as 1939. Of the used car owners, 46.9 per cent indicated their hope to buy another car in 1938 and 24.6 per cent in 1939.

"While subsequent events have not borne out this expression of a desire to purchase cars, it would seem that there is a willingness on the part of these typical families in these 16 cities to replace their present car when their general financial status is sufficiently assured," is the observation of Don D. Patterson, director of the national advertising department of the Scripps-Howard Newspapers, the department responsible for making this inventory.

The method by which this study was made was that of securing the co-operation of the Parent-Teacher Assns. and similar organizations in the 16 cities. Through that co-operation a controlled distribution of the questionnaires was made in all sections of each of the cities to the members, neighbors and friends of the participating clubs. These women, together with their families, made an actual inventory of their ownership of automobiles and tires, their use of gasoline and oil, and numerous other product classifications. It is believed to be the most extensive study ever made of this type by a publisher.

Population Considered

In order to give an accurate indication in each city, the cross-section of the families was allocated in proportion to population. In the largest city, Cleveland, 2 per cent of the families reported, while in the smaller cities of Evansville and Knoxville the number of families reported represented 6.8 per cent in the former city and 8.2 per cent in the latter.

Of the automobiles reported, 47.7 per cent were 1934 models or earlier, which closely parallels the number who expressed a desire to buy a car, new or used. There is the same variance by individual cities in the presence of models by years, as is true of all of the facts presented in the entire study.

In San Diego, for example, 58.4 per cent of the cars were 1934 models or earlier, while in Washington only 38.3 per cent of the cars fell into this classification.

This variance is also brought out in car ownership. San Diego was the city reporting the highest percentage of ownership, with 84.3 per cent of the families in the Inventory reporting an automobile. The lowest percentage of automobile ownership was in Knoxville, where 59.5 per cent of the families reported cars. San Diego reported the largest percentage of used cars, 41.4 per cent, and Washington the smallest percentage, 18.7 per cent.

Divided Into Groups

The families in each city were divided into probable income groups on the basis of the median rental classifications of the United States Census. An arbitrary division, based on previous research practice and acceptance, was made of the families into three groups on this basis: the first, or high income group, being approximately 15 per cent of the families; the second, or middle class group, being approximately 60 per cent of the families; and the third, or lower income group being approximately 25 per cent of the families.

On this basis, an analysis of used car ownership by cities reveals that there are used car buyers in every income group. The used car ownership by the higher income group runs from 44 per cent of the total cars in one city to 16.7 per cent in a second city.

The middle class ownership varies from a low of 30 per cent in another city to a high of 51.3 per cent in a fourth. In the lower income group these percentages to the total cars vary from 37.7 per cent to 66.7 per cent.

The fact that car owners in these cities shopped before buying new and used cars is indicated in an analysis of what cars were looked at before their present car was bought.

In the popular price field, 10 per cent or more of the families looked at two or three cars; in the medium price field, 10 per cent or more of the families looked at four to five cars; and in the upper price field, 10 per cent or more looked at two to three cars. In used cars, 10 per cent or more of the families looked at four to five cars.

Car Owner Loyalty

Indication is also given in the Inventory of the loyalty of the present car owners to the make of car they now own, those purchased new and those purchased used. This is given by the total cars reported and also for each city individually on a new and used basis. This was in answer to the question—"When you replace your present car what make will you most likely choose?" In many instances in cities the new and used car loyalty to a make parallel and in others there is a wide variance.

This variance brings up the interesting speculation on the subject of the effect of the used car purchase on the owner, if the next car purchased is a new car.

In addition to the information cited, the study contains an analysis for each of the 16 cities of makes by year of model for cars purchased new and cars purchased used; the gasoline and oil used by these families; and also the tires on their cars.

OTHER CARS INVESTIGATED—BY OWNERS OF CARS PURCHASED NEW

Total—All Sixteen Cities

QUESTION - What other makes of cars did you investigate before buying your present car?

CARS INVESTIGATED / CARS NOW OWNED	FORD %	CHEVROLET %	PLYMOUTH %	DODGE %	BUICK %	PONTIAC %	OLDSMOBILE %	STUDEBAKER %	TERRAPLANE %	CHRYSLER %	PACKARD %	DE SOTO %	NASH %	HUDSON %	GRAHAM %
FORD		31.7	26.9	15.5	6.7	11.9	8.3	8.9	21.0	5.8	5.5	8.3	9.1	12.2	13.3
CHEVROLET	30.5		30.8	16.6	8.8	21.1	14.5	9.1	19.9	5.5	3.8	9.3	10.9	10.2	14.2
PLYMOUTH	26.6	27.5		20.2	4.9	13.7	7.3	11.1	18.7	13.1	4.2	20.1	10.3	12.2	8.3
DODGE	9.5	9.3	12.4		10.1	12.6	11.3	12.7	10.6	14.0	7.8	18.3	12.7	12.5	9.2
BUICK	5.4	4.9	3.9	8.3		10.3	17.1	15.2	3.5	15.0	23.7	9.3	12.4	11.9	12.8
PONTIAC	6.5	8.6	6.4	8.0	9.1		12.8	6.4	6.4	7.3	6.3	6.1	6.4	6.5	6.0
OLDSMOBILE	3.7	5.5	3.8	8.6	17.0	10.6		10.2	5.4	10.0	12.2	7.1	9.7	9.4	9.6
STUDEBAKER	2.0	1.1	1.6	3.5	5.9	2.6	3.7		2.4	6.1	5.7	3.2	4.8	3.4	4.1
TERRAPLANE	1.5	1.9	2.1	1.3	.5	1.6	1.0	1.4		.5	.9	1.3	.9	1.7	.5
CHRYSLER	1.6	1.3	2.7	4.1	6.3	2.5	5.0	5.0	.6		6.0	7.5	6.3	4.6	4.1
PACKARD	2.2	1.1	1.5	3.1	13.6	3.3	7.1	5.8	1.2	6.3		2.7	4.5	4.3	3.2
DE SOTO	1.3	1.1	2.5	4.1	1.2	2.5	2.2	3.2	.9	5.1	1.4		3.0	2.3	1.8
NASH	1.2	1.1	1.2	1.7	2.8	1.5	2.1	2.5	1.2	3.2	2.5	1.2		1.4	5.1
HUDSON	1.1	.9	.8	.8	1.4	.8	2.1	1.6	3.6	1.5	2.2	.8	1.5		1.8
GRAHAM	.4	.4	.4	.5	.8	.7	.3	1.1	.3	.7	.8	.7	1.5	1.4	
OTHERS	6.5	3.6	3.0	3.7	10.9	4.3	5.2	5.8	4.3	5.9	17.0	4.1	6.0	6.0	6.0

"—" LESS THAN 0.1% INCLUDED IN "OTHERS"

NEWSPAPER SURVEY of owners of cars purchased new, conducted by the Scripps-Howard newspapers in 16 cities, reveals the incidence of competition for each make of car through a tabulation of the "other cars investigated" by the prospective buyer.

Fay Faurote, 59, Is Dead in N. Y.

GARDEN CITY, L. I.—Fay Leone Faurote, advertising and automotive publicity man, and co-founder of the Detroit Motor School which later became the Detroit Institute of Technology, died here this week.

He started his career in the Olds Motor Works at Lansing as advertising manager. A classmate of his, the late Howard E. Coffin, was his co-partner in the Detroit Motor School.

At various times Mr. Faurote was associated with the H. K. McCann Advertising Agency, the H. E. Lesan Agency, the educational advertising division of Curtiss Airplane and Motor Corporation, and in 1920 founded his own advertising agency. He was once publicity man for the Society of Automotive Engineers.

Hupp Discloses Plans for Use of Cord Body Dies

DETROIT.—A letter to stockholders of the Hupp Motor Car Corp., sent this week by President S. L. Davis, discloses what the company plans to do with the Cord dies, tools and fixtures purchased by Hupmobile.

As the letter indicates, the Cord body dies will be used in the manufacture of the two low-priced models to be put on the 1939 market. While the Cord had a front-axle drive, the new, small 1939 Hupmobiles will be of the conventional rear-axle drive, the chassis being entirely new and engineered by Hupp throughout on a 115-inch wheelbase.

Certain important changes further to modernize the appearance of these cars are being made in the Cord dies, including a new and different front-end design.

There will be two new small Hupmobiles, both on the same wheelbase—115 inches as against the Cord's 125 inches—both with the same bodies, made from the redesigned Cord dies. One will be a four-cylinder and the other a six, and both will be listed at considerably less than $1,000 delivered in Detroit, the four, of course, being the lower priced.

"The larger models will be continued in 1939 with improvements, with the result that Hupp dealers will be offered a line covering the most popular price ranges," Davis said.

Israel, Arnold Get New Posts at Nash Motors

DETROIT.—Announcement is made by W. A. Blees, Nash general sales manager, of the promotion of R. H. Israel and O. L. Arnold, divisional sales managers, to the posts of assistant general sales managers.

R. H. Israel

O. L. Arnold

Israel, who will continue to make his headquarters in New York City, where he is president and director of Nash Motors Co. of New York, Inc., will now serve as assistant general sales manager in charge of the east. His territory takes in the entire eastern portion of the United States. Its westernmost boundary is the west coast of Michigan.

Titled assistant general sales manager in charge of the west, Arnold, whose headquarters are being moved from the main Nash plant at Kenosha, Wis., to Nash sales headquarters in Detroit, will be in charge of sales activities in the midwestern and western portions of the country.

M. M. Roberts

Israel has been with Nash since 1934, Arnold came to the company in 1936.

Blees announced at the same time, the appointment of Morris M. Roberts, automotive sales and promotion executive, as retail merchandising manager. For the last five years, Roberts has been sales promotion manager of the Hudson Motor Car Co. and has had wide experience in actual field work.

New Groover Offered

SPRINGFIELD, Ill. — Weaver Mfg. Co. has placed on the market a new electric tire groover, which weighs only two pounds in use. It cuts any depth from 1/16 to ¼ inch, in any width suitable to the tire size and pattern.

For news of the men who make news in the automotive world, read Chris Sinsabaugh's authoritative "Sparks" column.

OTHER CARS INVESTIGATED—BY OWNERS OF CARS PURCHASED USED

Total—All Sixteen Cities

QUESTION - What other makes of cars did you investigate before buying your present car?

CARS INVESTIGATED / CARS NOW OWNED	FORD %	CHEVROLET %	PLYMOUTH %	DODGE %	BUICK %	PONTIAC %	OLDSMOBILE %	STUDEBAKER %	TERRAPLANE %	CHRYSLER %	PACKARD %	DE SOTO %	NASH %	HUDSON %	GRAHAM %
FORD		37.0	26.3	19.8	17.7	18.6	18.4	16.6	22.3	15.7	13.9	17.0	17.1	19.1	18.8
CHEVROLET	33.6		31.4	22.6	17.5	29.0	21.0	18.8	26.2	18.3	14.4	19.7	21.3	15.6	22.9
PLYMOUTH	21.9	24.3		20.0	8.4	17.8	14.4	9.3	14.6	17.2	5.4	21.1	15.5	12.8	9.4
DODGE	10.1	9.1	11.6		10.0	8.6	10.1	8.7	5.7	11.8	6.4	12.1	8.5	8.5	10.6
BUICK	6.0	4.8	5.3	6.3		6.0	9.7	11.5	5.3	9.5	16.3	7.6	7.0	5.0	7.1
PONTIAC	5.9	5.8	6.0	5.2	7.0		7.8	5.3	3.3	3.0	4.5	4.0	2.3	6.4	5.3
OLDSMOBILE	3.6	3.8	3.3	5.2	8.0	6.8		6.7	2.0	7.1	6.4	1.8	3.9	5.7	2.4
STUDEBAKER	1.9	1.2	1.2	2.7	4.6	1.4	2.4		1.3	1.2	2.5	1.8	3.9	4.3	2.4
TERRAPLANE	1.6	2.0	1.5	2.0	1.5	.6	2.1	1.4		1.5	--	1.8	2.7	5.7	4.1
CHRYSLER	2.0	1.6	2.4	2.2	3.9	1.1	2.6	2.5	.7		5.9	3.6	1.2	2.8	2.9
PACKARD	1.8	.9	1.4	1.2	4.3	1.9	1.2	2.8	2.0	2.9		.5	2.7	2.1	1.2
DE SOTO	1.5	1.4	2.4	3.1	1.2	1.8	1.4	2.0	3.0	3.2	3.0		2.3	.7	2.9
NASH	1.4	1.0	1.3	1.7	3.0	1.2	2.3	3.4	1.3	1.8	1.5	1.8		4.2	2.9
HUDSON	.9	.7	1.0	2.1	2.5	.6	.9	2.0	3.0	.9	1.5	.9	2.3		1.2
GRAHAM	.4	.3	.5	.5	.7	--	.3	.8	1.0	.6	1.0	.5	.8	--	
OTHERS	7.4	6.1	4.4	5.4	9.7	4.6	5.4	8.2	8.3	5.3	17.3	5.8	8.5	7.1	5.9

"--" LESS THAN 0.1% INCLUDED IN "OTHERS"

OTHER CARS INVESTIGATED by used car owners before they made their purchases is detailed in tabular form in this chart of a survey conducted in 16 cities by the Scripps-Howard newspapers.

Allis-Chalmers to Build $240,000 Plant Addition

WEST ALLIS, Wis.—Allis-Chalmers Mfg. Co. has announced plans for the erection of a one-story, 205 by 372 foot addition to its La Porte, (Ind.) plant for production of its new small combine.

The addition will cost about $240,000 with expenditures for tools and equipment bringing the total cost up to about $800,000. The new plant is expected to be completed by Dec. 1 and, when production is underway, an additional 200 to 300 persons will be added to the payrolls.

NOW! A NEW BANTAM "60"
FOR ONLY
$399* *Coupe
Delivered-Equipped at Butler Including Taxes and Accessories
OTHER MODELS
ROADSTER · PANEL AND PICK-UP TRUCKS · STATION WAGON
4 PASSENGER SPEEDSTER
DEALERS—YOUR TERRITORY MAY BE OPEN
For Full Details, Wire, Write or Phone
AMERICAN BANTAM CAR CO., BUTLER, PA.

Canada Eases Tariff to Aid Small Car Makers

Dominion's Duty Is Lifted On Certain Spare Parts

MONTREAL. — Automobile manufacturers producing less than 10,000 vehicles in Canada annually, will be able to bring in certain spare parts from United States free of duty if they can show the completed vehicle is 40 per cent Canadian content, as a result of an order-in-council announced by the Dominion Government. The content requirement formerly was 50 per cent.

When there was a 35 per cent duty in Canadian tariff against cars made in the U. S., several U. S. companies had subsidiary plants in Canada where cars were partially manufactured. By the Canada-U. S. trade agreement, however, the tariff against U. S. cars was cut from 35 per cent to 17½ per cent.

In order to make up to some extent for this loss of protection by Canadian companies, provision then was made that in the case of the big companies producing more than 10,000 cars a year in Canada, they could bring in certain parts made in United States free of duty, provided the finished car had 65 per cent Canadian content. For the companies with Canadian production under 10,000 cars annually, they were allowed to bring in parts free if their finished cars had 50 per cent Canadian content.

Customs experts here say the result was that the big companies were able to show a 65 per cent Canadian content and continued to run their Canadian plants, but the smaller companies found difficulty in showing a 50 per cent Canadian content and many ceased Canadian production, finding it more advantageous to manufacture the cars in U. S. and pay the 17½ per cent duty.

To encourage these smaller companies to resume production in Canada, the Canadian content requirement has been reduced from 50 per cent to 40 per cent. The 65 per cent content in the case of the larger companies remains unchanged. The action was taken on recommendation of Revenue Minister Ilsley, who is also acting finance minister. He consulted with the tariff board, the order in council sets out, and received "a number of delegations which strongly urged that some action be taken, in the interest of employment of labor, particularly in Tilbury, Ont."

Industry Science To Be Shown at N. Y. Car Show

NEW YORK.—In view of the growing interest in the subject of science in industry, the management of the National Automobile Show has set aside space in Grand Central Palace, for displays, which will reveal to the public what science and research are doing for the improvement of the motor car.

Inasmuch as the automobile owes much of its development to painstaking research in many industries, several unusual displays are expected to make their appearance at the show Nov. 11-18.

A few years ago exhibitors introduced moving displays which demonstrated how brakes, starters and other component parts of a car functioned. They proved so interesting and instructive that more action displays than formerly will be seen at this year's event. Safety exhibits also will be a feature.

Fla. Receipts Off

TALLAHASSEE, Fla.—State Comptroller J. M. Lee reports that gasoline tax collections for July totaled $1,658,846, compared with $1,707,486 in July 1937.

Nickelgram 224A

GOLD MINERS SAVE MONEY WITH NICKEL ALLOY STEELS

For thirty years the Yuba Mfg. Co., San Francisco, has built dredges used in mining of precious metals—gold, platinum, etc. Yuba also is one of the pioneer users of alloy steels on the Pacific Coast. Functioning of these huge, costly dredges depends largely upon hidden parts such as bucket pins, heel plates, and driving shafts. Expensive shut-downs and delays occur if even one of these parts fails in service. To provide insurance against failure in this exacting service, Yuba makes all bucket pins from high-grade Nickel steel forgings. Heel plates are forged from Nickel-chromium steel. Shafts in all the drives, including winches, are made from strong Nickel steels. These high-grade, durable Nickel alloy steels have played an important part in the development of mining dredge equipment.

NICKEL ALLOYS

THE INTERNATIONAL NICKEL COMPANY INC. New York, N. Y.

Dodge Managers, Dealers Attend First '39 Meeting

DETROIT.—Managers of the sixteen field regions of the Dodge Division of Chrysler Corp. attended the first of the new season's organization meetings, at Hotel Statler, Sept. 7 and 8.

Also attending the meeting were thirty-two Dodge dealers, two from each region, who had been called to Detroit for a discussion of 1939 merchandising policies and sales plans which will govern the work of Dodge dealers and their sales personnels.

In order to secure an accurate and reliable cross-section of dealer reaction and regional opinion, the thirty-two dealer participants of the gathering were invited mainly on the basis of their familiarity with the varying business and other conditions existing in the trade areas represented by them.

"Though but a short time will separate the 1938 and 1939 seasons, a good deal of water has flowed over the automotive mills and changes have taken place and trends developed which we wish to take into account in setting our sales machinery into motion for 1939," said Forest H. Akers, Dodge vice president and director of sales.

Factory executives attending the meeting included Chrysler vice president A. vanDerZee; Forest H. Akers, Dodge vice president and director of sales; Frank J. Timmens, general sales manager; E. J. Poag, assistant general sales manager; J. D. Burke, director of truck sales; J. W. Hutchins, assistant general sales manager; L. D. Cosart, assistant general sales manager, Plymouth Division of Chrysler Corp.

STRIKING SCORE BOARD, on which daily street accident figures are posted, is the latest means to be utilized by the Hamilton (Ont.) Automobile club in its campaign to reduce car accidents. The sign board, located in the busiest section of the city, is double sided so that it can be read by motorists passing on either side. Car deaths this year in Hamilton number 569, as against 827 for the same period of last year.

Waukesha's Dividend

WAUKESHA, Wis.—The Waukesha Motor Co. has declared the regular quarterly dividend of 25 cents per share, payable Oct. 1. The dividend is subject to deduction of 2½ per cent applicable to the Wisconsin state dividend privilege tax, which is paid direct to the state of Wisconsin.

Chicago Sales In Aug. Show Drop from July

CHICAGO.—August new car registrations in Cook County (Chicago) showed a total of 4,022 units as against 5,027 for July, and 10,308 for August last year, according to compilations released this week by the Bureau of Motor Advice.

The surprise of last month was the climb of Buick to third place with 483 units. Chevrolet topped all makes with 833, Ford being second with 698. Plymouth was fourth with 451, Oldsmobile fifth with 232 and Packard sixth, ahead of both Dodge and Pontiac, with 226. The latter two registered 220 and 202 units, respectively.

☆ Specialized Design ☆ Modern Production ☆ Prompt Delivery ☆ World-wide Service ☆

Each related group of AC products has its own specialist engineers, who do both original designing on new products and adapting of existing products to specific uses. Large, sustained volume on all products permits high quality manufacturing at volume prices. Delivery is habitually prompt. The combined facilities of AC Service Stations and United Motors Service Branches and Service Stations in the United States and Canada, and the overseas organizations of General Motors Corporation, Export Division, assure expert service on AC products all over the world.

AC

AC NOW BUILDS THESE *Quality* PRODUCTS

AIR CLEANERS
AMMETERS
CARBURETOR INTAKE SILENCERS
CARBURETOR INTAKE SILENCERS AND AIR CLEANERS
DIE CASTINGS
DIE CASTING MACHINES
FLAME ARRESTERS
FLEXIBLE SHAFTS AND CABLES
FUEL PUMPS
FUEL AND VACUUM PUMPS
GASOLINE GAUGES
GASOLINE STRAINERS
INSTRUMENT PANELS
ENGINE BEARINGS
LOCKER DOORS
OIL FILTERS
PRESSURE GAUGES
RADIATOR PRESSURE CAPS
REFLEX SIGNALS
REMO INJECTORS AND FLUID
SPARK PLUGS
SPARK PLUG CLEANERS
SPARK PLUG TESTERS
SPARK PLUG GAPPING TOOLS
SPEEDOMETERS
TACHOMETERS
THERMO GAUGES
VACUUM PUMPS

AC SPARK PLUG DIVISION • *General Motors Corporation* • FLINT, MICHIGAN

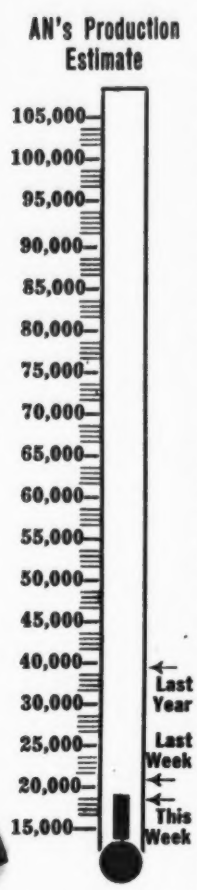
Output Hits 19,439 As '39 Operations Increase

Studebaker Joins List Working on '39 Models

By Pete Wemhoff
Associate Editor, AN

DETROIT. — Despite loss of one working day, car and truck production for the week ending Sept. 10 will total 19,439 units, only slightly below the previous week's 20,601 vehicles. In the comparable period a year ago 38,503 vehicles were assembled.

The Labor Day holiday prevented this weeks output from continuing a steady climb started recently, but operations from now on are expected to show a gradual uplift until all producers are in volume production on 1939 models.



Studebaker joined the list of plants turning out 1939 models this week, raising the total to four, while Ford remained as the only company still turning out 1938 cars. Buick, Plymouth, and Packard, the other three working on 1939 cars, bumped operations this week and figure to gradually increase assemblies for the next few weeks. Several other makers are likely to join the 1939 list next week.

On four days, Ford projected 8,125 units for this week, compared with 11,435 vehicles in the five-day previous week and approximately 20,000 units in the corresponding period of 1937.

Buick, the only General Motors division operating 1939 assembly lines, boosted output from 1,716 to 2,500 units this week, the latter exceeding the same company's 2,085 units in the same period of 1937.

Plymouth, which assembled 5,025 new 1939 cars last week, expects 5,150 units this week. Coupled with Dodge truck's estimated 155 jobs this week, the Chrysler total for the week is placed by Automotive News at 5,305 units.

Packard's 1,090 projection for the week topped the independent producers, with Studebaker's 1,640 units being a close second. In the previous week Packard assembled 522 new cars, while Studebaker turned out 32 trucks. Bantam had 30 units projected for the week, while the miscellaneous group accounted for 1,325 vehicles, according to Automotive News estimates.

For news of the men who make news in the automotive world, read Chris Sinsabaugh's authoritative "Sparks" column.

Plant Activity

Bantam	Continues at slow pace
Buick	bumps operations sharply
Cad.-LaS.	nearing end of changeover
Chevrolet	still on switch-over
Chrysler	finishing up changeover
DeSoto	ready to start '39 production
Dodge	continues truck production
Ford	expects four days
Graham	continues preparations
Hudson	still on changeover
Hupmobile	working on new models
Lincoln	continues '39 preparations
Nash	remains on changeover
Oldsmobile	finishing up changeover
Packard	boosts operations
Plymouth	rate upped on '39 models
Pontiac	nearing end of preparations
Studebaker	starts on new models
Willys	shuts for changeover

"A Word in Edgewise," a regular feature by George M. Slocum, offers a unique viewpoint from the motor world.

AN's Production Estimate

(U. S. and Canada)

Weeks Ended Sept. 10, Sept. 3,

	Week Ending Sept. 10	Same Week 1937*	Week Ended Sept. 3*	Sept. to Date*	Jan. 1 to Sept. 11 1937*	Jan. 1 to Sept. 1 1938
GEN. MOTORS	2,500	12,085	1,716	2,816	1,381,994	614,58
†Chevrolet	‡	10,000	‡	‡	861,865	436,95
Buick	2,500	2,085	1,716	2,816	148,287	86,55
Pontiac	‡	‡	‡	‡	182,369	41,94
Oldsmobile	‡	‡	‡	‡	156,288	36,79
Cad.-La Salle	‡	‡	‡	‡	33,185	12,34
FORD	8,125	20,000	11,435	12,685	1,046,013	438,25
†Ford	8,125	20,000	11,435	12,685	1,019,150	425,07
Lin.-Zephyr.	‡	‡	‡	‡	25,913	12,53
Lincoln	‡	‡	‡	‡	950	62
CHRYSLER	5,305	‡	5,222	7,780	706,700	308,97
†Plymouth	5,150	‡	5,025	7,625	330,550	152,24
†Dodge	155§	‡	197§	155§	252,550	81,06
Chrysler	‡	‡	‡	‡	65,560	32,31
De Soto	‡	‡	‡	‡	59,540	23,34
PACKARD	1,090	200	522	1,265	82,823	30,37
†HUDSON	‡	‡	‡	‡	79,157	28,56
†STUDEBAKER	1,064	1,968	32§	1,064	65,361	24,01
NASH	‡	‡	‡	‡	62,275	19,29
†WILLYS	‡	‡	496	‡	60,790	9,11
†BANTAM	30		20	30		2,38
GRAHAM	‡	250	‡	‡	13,851	1,84
HUPMOBILE	‡		‡	‡		26
†MISC.	1,325	4,000	1,158	1,483	313,866	117,78
†TOTAL	19,439	38,503	20,601	27,123	3,817,330	1,595,45

*Revised. †Includes trucks. ‡Closed. §Trucks only.

Passenger Car Registrations

Seven Months, Plus 7 States for August, 1938-1937

	Aug.	Aug. Pos.	1938	1938 Pos.	1937	1937 Pos.	Unit Loss
Chevrolet	3,613	1	281,034	1	494,555	2	213,521
Ford	2,716	2	238,045	2	583,182	1	345,137
Plymouth	1,481	3	160,763	3	317,691	3	156,928
Buick	1,149	4	94,312	4	127,372	7	33,060
Dodge	664	5	63,618	5	174,364	4	110,746
Pontiac	643	6	58,360	6	142,004	5	83,644
Oldsmobile	600	7	55,186	7	129,891	6	74,705
Packard	415	8	29,770	8	67,511	8	37,741
Chrysler	294	11	29,339	9	57,658	10	28,319
Hudson	259	12	24,368	10	63,380	9	39,012
De Soto	238	13	21,930	11	48,174	12	26,244
Studebaker	333	9	20,704	12	48,144	13	27,440
Nash	304	10	20,389	13	49,961	11	29,571
Cad.-La Salle	189	14	14,998	14	26,927	15	11,929
Lincoln	126	15	10,896	15	16,703	16	5,807
Willys	98	16	8,032	16	35,406	14	27,374
Graham	19	17	2,761	17	9,244	17	6,483
Miscellaneous	22		1,603		1,968		365
TOTAL	13,163		1,136,108		2,394,135		1,258,027

August Car Sales Running 12 Per Cent Below July

DETROIT.—With the new car season approaching nearer, passenger car sales in the United States in the first 23 days of August fell 12 per cent below sales in the same period of July, R. L. Polk & Co. reported this week on the basis of returns for the first two thirds of the month received from major United States cities.

Earlier reports showed the nation's new car sales in the first 1 days of August only about 7 per cent below sales in the first 1 days of July, the augmented decrease for the next 12 days of August following normal seasonal trends.

With records better than the average national decrease of 1 per cent for the first 23 days of August are the New England states, with a drop of 8.26 from July sales; East North Central states, with a 9.79 per cent drop; East South Central, down 7.5 per cent, and the Pacific Region; with the best record in the country, down only 3.31 per cent.

New Commercial Car Registrations, 7 States for Aug., 1938-1937

Figures supplied by R. L. Polk & Co., New Jersey Motor List Co., and for New York City area by Sherlock & Arnold.

STATE		Autocar	Brockway	Chevrolet	Diamond T	Divco	Dodge	Federal	Ford	G. M. C.	Hudson	Indiana	International	Mack	Plymouth	Reo	Stewart	Studebaker	White	Willys	Misc.	TOTAL		STATE
Arkansas	'38			204	4		34		198	29			76		4							549	'38	Arkansas
	'37			477	4		93		507	121	5		110		33	4		5				1359	'37	
Delaware	'38		1	35	1		9		29	6			16		3							100	'38	Delaware
	'37	3		88			12		53	16	4	1	21	1	3			1	1		2	206	'37	
Dist. of Columbia	'38		1	68		8	9	1	38	12			14	1	1	2		1	6	2	1	165	'38	Dist. of Columbia
	'37	3		160	1	11	35		59	15	3		13	3	1			1	1	4		310	'37	
Illinois	'38	3		431	37		141	11	318	108	3	1	273	6	32	13		8	10	7	13	1415	'38	Illinois
	'37	5		711	59	5	298	12	626	129	15	3	383	21	70	22	5	13	20		33	2430	'37	
North Dakota	'38			103	2		24		128	11			79		6	1		2		1		357	'38	North Dakota
	'37			172	4		54	1	153	9	4		115		7			7				526	'37	
Vermont	'38		1	25			12		18	6			8		4				1	1		76	'38	Vermont
	'37		1	55	3		22		76	23	1	2	23	2	4		1	4	3			220	'37	
West Virginia	'38			128	3	2	56		94	65	2		39		17	3			1	6	8	424	'38	West Virginia
	'37			295	10	4	112	1	201	74	7		93	2	47	10		5	6		6	873	'37	
Total, 7 States for August	'38	3	3	994	47	10	285	12	823	237	5	1	505	7	67	19		11	18	17	22	3086	'38	Total, 7 States for August
	'37	11	1	1958	81	20	626	14	1675	387	39	6	758	29	165	36	6	36	31	4	41	5924	'37	
Total, to Date	'38	1015	711	77363	2670	795	23120	823	64815	12681	550	282	32560	2265	4947	1754	241	1168	2141	1244	1513	232658	'38	Total, to Date
	'37	1338	1016	119885	5627	752	38765	1678	135561	28193	3401	943	46715	3606	8355	2954	790	3623	3850	627	2008	409687	'37	

New Passenger Car Registrations, 7 States for August, 1938-1937

Registration figures are compiled from the records in the secretary of state's offices and published as released weekly in Automotive News. When all states have been reported, the entire table is reprinted usually not later than the tenth of the following month. Figures supplied by R. L. Polk & Co., New Jersey Motor List Co., and for New York City area by Sherlock & Arnold.

STATES		CHRYSLER					GENERAL MOTORS							FORD			NON-AFFILIATED									STATES
		Chrysler	DeSoto	Dodge	Plymouth	CHRYSLER TOTALS	Buick	Cadillac	Chevrolet	La Salle	Oldsmobile	Pontiac	G. MOTORS TOTALS	Ford	Lincoln	FORD TOTALS	Graham	Hudson	Nash	Packard	Studebaker	Willys	Misc.	GRAND TOTALS		
Arkansas	'38	9	4	52	107	172	39		362	7	21	31	460	269	3	272		6	11	13	5	3		942	'38	Arkansas
	'37	38	18	120	266	442	66	3	533	8	60	67	737	455	18	473	5	29	27	13	19	11		1756	'37	
Delaware	'38	7	9	21	35	72	32	3	117	1	25	29	207	73	2	75		4	11	12	6	3		390	'38	Delaware
	'37	32	16	71	126	245	73	9	285	13	85	90	555	146	7	153	2	19	9	35	14	17	1	1050	'37	
Dist. of Columbia	'38	26	22	96	123	267	140	9	273	15	45	81	563	220	13	233	3	19	19	33	40	9	3	1189	'38	Dist. of Columbia
	'37	67	51	214	367	699	203	13	494	37	146	182	1075	405	22	427	21	49	10	67	49	30	8	2435	'37	
Illinois	'38	212	158	393	969	1732	815	69	2321	70	428	423	4126	1734	95	1829	15	176	237	311	224	62	13	8725	'38	Illinois
	'37	498	629	1930	2926	5983	1444	116	4445	257	1301	1549	9112	3634	153	3787	83	487	727	671	338	291	14	21493	'37	
North Dakota	'38	13	6	19	67	105	19		143	1	13	12	188	161	4	165		10	7	1	10	1		487	'38	North Dakota
	'37	11	25	52	131	219	21		330	2	33	27	413	267	12	279		32	19	5	8	14		989	'37	
Vermont	'38	5	7	16	29	57	21		54	5	16	19	115	50	1	51		11	7	7	4	4	2	258	'38	Vermont
	'37	27	18	70	104	219	55		210	14	48	77	404	160	6	166	4	40	19	32	16	19		919	'37	
West Virginia	'38	22	32	67	151	272	83	1	343	8	52	48	535	209	8	217	1	33	12	38	44	16	4	1172	'38	West Virginia
	'37	107	74	241	562	984	155	5	900	13	172	180	1425	581	15	596	26	83	41	70	61	84		3370	'37	
Total, 7 States for August	'38	294	238	664	1481	2677	1149	82	3613	107	600	643	6194	2716	126	2842	19	259	304	415	333	98	22	13163	'38	Total, 7 States for August
	'37	780	831	2698	4482	8791	2017	146	7197	344	1845	2172	13721	5648	233	5881	141	739	852	893	505	466	23	32012	'37	
Total, to Date	'38	29339	21930	63618	160763	275650	94312	6537	281034	8461	55186	58360	503890	238045	10896	248941	2761	24368	20389	29770	20704	8032	1603	1136108	'38	Total, to Date
	'37	57658	48174	174364	317691	597887	127372	7852	494555	19075	129891	142004	920749	583182	16703	599885	9244	63380	49961	67511	48144	35406	1968	2394135	'37	

Used Car Index

The average used car prices, taken from the weekly Used Car Selling Prices chart, shows the following:

	High	Low
Jan. 29	$572	$501
Feb. Average	565	497
Mar. Average	551	494
Apr. Average	549	494
May Average	542	487
June Average	527	478
July Average	525	469
Aug. 6	539	456
Aug. 13	516	439
Aug. 20	529	451
Aug. 27	528	449

Colo. Judge Bans Sales Levy On Traded-In Cars

DENVER.—Colorado will lose between $50,000 and $75,000 a year in sales tax collections as the result of a ruling rendered last week by District Judge Henry S. Lindsley. The decision denied the state the right to charge sales tax on used cars sold after they have been turned in as part payment on new cars.

Suit was brought several months ago by Hartman Bros. Inc., of Montrose, Colo., and C. Ray Bass, purchaser of a used car, against Homer F. Bedford, state treasurer. The suit claimed that Bass purchased a car turned in on a new automobile purchased by J. A. Spring, also of Montrose. Spring paid the sales tax on the full price of the new car, which was $1,045, though he applied his old car on the purchase. Later Bass bought the used car for $400 and refused to pay the sales tax, on the ground it had been paid by Spring. The state demanded $8 sales tax for the second transaction.

The case will be taken into the supreme court, according to Assistant Attorney General Elmer P. Cogburn. "The ruling makes administration of the sales tax law covering used articles virtually impossible," he said.

Cogburn said used car buyers affected by the ruling will be allowed to pay their sales tax under protest and refunds will be made if the Lindsley decision is upheld by the supreme court.

Nickelgram 225A

. WINGS
F STEEL
ICKEL ALLOYS GUARD FLIGHTS

ix years ago was launched the rst stainless steel airplane—The ioneer—built by Edward G. udd Mfg. Co. It attracted conderable attention then because very part of its structure—hull, ing framing and ribs—all of hese were fabricated from "18-8" tainless steel containing 18 per ent chromium and 8 per cent ickel. That plane was flown nder all kinds of atmospheric onditions for three years. Durig the past three years it has ood, stripped of all fabric, in ront of the Franklin Institute, hiladelphia. After six years The ioneer was dismantled and inpected, found to be in perfect ondition. Thus, high strength, orrosion resisting alloys of Nickel erve not only to strengthen every ircraft engine built in America ut also serve in many other newer ways to promote aviation progress.

NICKEL ALLOYS

THE INTERNATIONAL NICKEL COMPANY INC. New York, N. Y.

Actual top and bottom prices on 1935, 1936 and 1937 Used Cars, as advertised in local newspapers of current week. SEDAN prices only used in this comparison. Newspapers co-operating include: Boston Globe; New York Times, Journal - American, World - Telegram;

Used Car Selling Prices

(As Advertised, Week Ending Aug. 27, 1938)

Atlanta Georgian-American; Pittsburgh Press; Cleveland Plain Dealer; Detroit News; Chicago Herald-Examiner; St. Louis Globe-Democrat; Cincinnati Post; Denver Post; Los Angeles Daily News, Examiner; Seattle Times.

MAKE		Boston	N. Y.	Atlanta	Pittsbrg.	Cleve.	Detroit	Chicago	Cinn.	Minn.	Denver	L. A.	Seattle	Nat. Av.
Buick "40"	'37	$675–$785	$775–$865	$725–$775	$695–$775	$645–$695	$625–$675	$665–$725	$695–$775	$650–$775	$795	$695–$790	$725	$690–$760
	'36	545– 585		545	550– 575	445– 625	395– 485	445– 495	595	585	565– 625	575– 585	685	520– 584
	'35	395			375– 395	265– 475	325		395	325– 375			575	337– 443
Buick "50-60"	'37		825– 845		795			775	775					790– 805
	'36		675		525– 575	595		495				625		532– 625
	'35	475	495– 575											485– 575
Chevrolet Master	'37		475	440	425– 445	425– 565	395– 445	395– 425	367– 475			575		408– 487
	'36			325		335– 445	295			395	395	385– 395	350	340– 391
	'35					235– 325	215– 235		295– 325	275		295		255– 295
Chevrolet Master DeLuxe	'37	565	539	580	475– 525	445– 595	475– 485	495	495– 525	525– 595	585– 595	595– 665	585– 645	521– 578
	'36			395– 420	349– 385	395– 425	350	365– 395	345– 425	395	465– 545	465– 495	485– 545	402– 440
	'35			265	295– 345	285– 295		255	325– 395	345	425	375– 385		300– 365
Chrysler Six	'37	635	619		645– 675	575– 695	545– 685	595	595		695	645– 765		603– 678
	'36		525	520	525– 585	487– 545	585		475				595– 625	520– 573
	'35			375	395	345– 395	300	395	375		465	465	565	358– 446
Chrysler Eight	'37		649		695	695	685					945	985	676– 875
	'36											495	715	495– 715
	'35				425									425
De Soto	'37	595– 625		625	575– 595	565– 659	567– 635	545– 565	565– 595		645– 665	585– 765		585– 636
	'36	475– 495	395– 499	425– 475	495	455		465	485	485– 525		435– 510	575	450– 507
	'35					365– 395		345	395			365		358– 385
Dodge	'37	545– 625	625	565– 625	535– 595	500– 625	560– 595	595	587– 645	595– 645	595– 695	645– 745		572– 642
	'36		445– 475	365– 390	435– 475	375– 525	395– 415	325– 445	437– 465	475	535– 565	545	569– 595	436– 490
	'35			275	295– 345	295– 345	245	345	295– 345	385	395– 425	435– 485	525	323– 400
Ford Standard	'37	415– 445	425– 475	350– 375	345	350– 475	360		325– 395		495	525– 545	535– 565	403– 442
	'36		335– 495		275	265– 395	220– 315		295– 318	345	425	375	395– 425	304– 393
	'35		275– 395	230	215	165– 245	145– 195	195	195		245	325		203– 256
Ford DeLuxe	'37	495	425– 525	475	375– 425	385– 445	350– 475	445– 475	395– 485	495– 525	565– 595	525– 595	585– 675	456– 520
	'36	350		315– 375	335– 345	285– 325	245– 315	310– 345	325– 365	385– 415	425– 465	435– 460	445– 465	350– 384
	'35			275	235– 265	200– 245	165– 225	225	250	285– 345	325	335– 385	335– 385	254– 306
Graham	'37				795		485					625		555– 710
	'36						365– 395	445		420		565		410– 468
	'35				300	295		235	295– 345		385	485		281– 380
Hudson Six	'37						525							525
	'36						400		396			455	565	398– 510
	'35			295		345			325	375				310– 360
Hudson Eight	'37					575					745		835	575– 790
	'36							535				485		485– 535
	'35							315						315
Hudson Terraplane	'37					485– 495			467	525	510		545– 625	501– 540
	'36	345		490	475	295– 395	310	395	375			415	375– 485	350– 443
	'35			335– 385	345– 385		215	285	267			375		290– 358
LaSalle	'37		875			895	785					945–1045		868– 938
	'36		625– 645				450	510– 585			675– 695	635		565– 640
	'35					325– 345		435						325– 390
Lincoln Zephyr	'37		765– 845			750	655– 750	645– 785		695– 765		765– 875	925	712– 824
	'36	645	645			527– 595	510	510– 585			795	615– 685		561– 653
	'35							435– 445						435– 445
Nash LaFayette	'37					445	465– 575	495– 545						468– 560
	'36											365		365
	'35													
Nash	'37		495					595			895	745		545– 820
	'36					425– 445	450	440	435					433– 445
	'35					445			379					379– 445
Olds Six	'37	635– 675	645– 675	625– 685	685	525– 669	625	575– 615	625– 765			666– 745	845	615– 708
	'36			395– 475	415– 465	395– 495	445– 485	425– 475	457– 525	485	595	445– 585	585	433– 520
	'35					375– 395	435	385	435		485	385	535	395– 462
Olds Eight	'37	725– 735	650– 735			675– 695	685	785	695	675				682– 729
	'36			475	485		525	515				595		492– 545
	'35	435							445					435– 445
Pontiac Six	'37	665	645	575– 645	580	500– 675	625	545– 575	565– 595			575– 685	735	575– 652
	'36	465				295– 495	350– 385	395– 425	365– 445	445	475	435– 525	475– 555	394– 471
	'35					225– 375	265		295– 325			375	465	262– 385
Pontiac Eight	'37	595				575– 685								585– 685
	'36					425– 490					495	473		450– 493
	'35													
Packard 120	'37	845	765– 825			665– 795	645– 685	675		875	875	685– 845	945	736– 835
	'36		565– 695	550	550	465– 575	475– 495	465– 485	565	585– 635	675– 685	545– 595	795	542– 614
	'35	580	475– 495			495	310– 365	395	395– 445	445		495– 595		430– 490
Plymouth	'37			525	525	425– 495							675– 695	542– 570
	'36					365– 445					375		535– 565	425– 462
	'35			195	190	275– 345							365	220– 355
Plymouth DeLuxe	'37	585	549– 559	525– 595	545– 585	395– 545	490	495	495– 525	535– 580	645	565– 660		510– 577
	'36	445	399– 425	365– 375	360– 395	365– 445	365	395	365– 395	425– 485		395– 495	485	382– 438
	'35			275	275	265– 335	265		245– 325	275		325– 425		275– 327
Studebaker Dictator	'37	565		595	595	495		595– 625	585		795			567– 639
	'36			480	475	325– 365		415			595	495		424– 484
	'35			225	225							365		225– 365
Studebaker President	'37			685								745		685– 745
	'36													
	'35													
Willys	'37	350		415	345– 415	245– 365	295– 325	325	295– 389	315	349	295– 385	345– 365	351– 376
	'36					225– 245	195– 245					215	245	212– 245
	'35					165								165

National Average, All Makes, $449–$528

Used Car Selling Prices, as advertised in the classified section of metropolitan newspapers nationally, are compiled exclusively by Automotive News as a copyrighted feature. This is the first time anywhere that bona fide top and bottom prices have been compiled from published figures to establish the trend of the market and the resulting national index. Where no prices are quoted, no car of make and model was offered during the period covered.

Motor Shares Bolstered by Detroit Investors

Stock Upswing Is Still Delayed By War Scares

Special to Automotive News

NEW YORK.—Considerable investment and speculative money is reported to have gone into automotive stocks within the past 10 days. This was accompanied by what Wall Street always greets as a good sign—buying of motors by Detroit interests.

Detroit investors are credited with first-rate knowledge of the outlook for the automotive industry and with being good judges of the values of motor shares. Many investors in Wall Street and their followers in various parts of the country most of the time are willing to follow Detroit in this respect.

But the stock markets continued to pay most attention to foreign developments, fearful that regardless of domestic outlook, heavy selling of stocks from abroad might upset the markets here. This fear undoubtedly is causing many potential investors to hold off in order that they may take advantage of any real foreign-inspired slump to acquire shares at what might be bargain prices.

It is impossible, therefore, for the domestic investor to make purchases on the basis of actual values based on the prospect at home, unless he is willing to run the risk of lower prices for a time, at least, if war comes to Europe.

In the meantime, however, there is not an entire absence of buying. It is believed much of this buying is being done in the belief that there will not be war and that when the situation abroad clears, the stage will be set for an advance in business activity and prices here at home.

Motor shares withstood in good shape the "house cleaning" by speculators prior to the Labor Day holiday. With the situation in Europe so critical, many speculative holders of stocks chose to sell prior to the week-end rather than hold through the holiday.

The motors in the week ended Sept. 7 registered small net gains over the preceding week, with the tire and rubber stocks picking up a full point in average price.

The Automotive News stock price averages for Sept. 7 compared as follows with the week preceding and a year ago:

	Last Week	This Week	Change	Year Ago
24 motors	32.06	32.73	+0.67	36.85
10 car-truck co.'s	32.51	33.16	+0.65	38.36
10 parts acces.	28.62	29.30	+0.68	34.26
4 tire-rubbers	25.11	26.11	+1.00	33.00

The gap in prices between this year and last continued to be narrowed. Two weeks ago the price average for the 24 stocks was 33.41 for this year, as against 42.37 a year ago. For the latest week the average was 32.73, comparing with 36.85 a year ago. By Nov. 20, 1937, the average had dropped to 27.64, which figure is well below the current average.

Dividends declared by automotive companies continued in August to run well below the corresponding month of last year. Stockholders may obtain some comfort from the fact that the outlook is that dividend payments in 1939 will again resume the upward trend and exceed those of 1938.

Car and truck companies in August declared dividends calling for the disbursement to stockholders of $13,480,000. This compared with $47,238,000 in the like month of last year. For the first eight months of this year the aggregate was $49,470,000, as against $143,871,000 in the corresponding period of 1937.

Parts and accessory companies in August declared $1,450,000 in dividends, comparing with $6,590,000 a year ago. For the first eight months, their declarations totaled $15,098,000, as against $58,160,000 a year ago.

Dividend declarations by the two groups in August amounted to $14,930,000, as against $53,828,000 a year ago. Their declarations for the first eight months of this year totaled $64,568,000, comparing with $202,528,000 in the like period of last year.

N.J. Again Takes Up Measure to Outlaw Sitdowns

TRENTON, N. J.—Another effort will be made when the New Jersey Legislature reconvenes here Oct. 17 to enact legislation outlawing sitdown strikes, providing for registration of all union officials with a proposed State Labor Relations Board before they could qualify as representatives for collective bargaining, and requiring that these collective bargaining agents be American citizens.

State Senator Arthur F. Foran, who unsuccessfully sought passage of such legislation last spring, has announced he will reintroduce the measure next month.

As chairman of the State Senate labor, industries and social welfare committee Senator Foran last spring tied up several CIO-backed labor bills and devoted much time to conferences with labor and industrial representatives in an endeavor to draft legislation, which would afford equal protection to both employer and employe. These efforts culminated in passage by the senate of his bill which was termed acceptable as a fair compromise by spokesmen of industry and the State AFL unit.

Opposition of CIO elements, followed by a defection in AFL ranks, blocked passage of the bill in the Assembly, however. Without being brought to a vote in the House, the measure died in committee when the Legislature terminated its regular 1938 business last June.

Although only emergency legislation is supposed to be considered at the forthcoming October session, backers of the Foran bill believe they may be able to rally sufficient support for its passage.

"A Word in Edgewise," a regular feature by George M. Slocum, offers a unique viewpoint from the motor world.

Last Minute Wall Street Wires

NEW YORK, Friday, Sept. 9 (3:10 p. m.)—Late rallies today reduced somewhat the earlier declines in most of the shares. Traders were still apprehensive over the European situation, but turnover in shares was the highest for the past few days. Automotive shares were off from one to two points.

NASFC Switches Convention To Chicago in November

Special to Automotive News

CHICAGO.—Directors of the National Assn. of Sales Finance Companies have canceled French Lick Springs, Ind., as the place and Oct. 6-8 as the dates of the annual convention, it was announced this week by Milan V. Ayres, secretary of the association.

The meetings, Ayres added, will be held in Chicago during November. He stated that a decision as to the exact dates and hotel is due next week.

Headlining the subjects on the convention program will be that of bank competition. Members are asked in the current issue of Times-Sales Financing, official organ of the NASFC, to come prepared for discussion and armed with a solution of the problem of bank competition.

"Perhaps bank competition is the biggest problem to face sales finance companies since the national association was organized in 1924," states the publication. "It is a problem that faces all of them, not merely the 'nationals', not merely the 'independents', not merely any other group.

"If all groups would get together to combat this menace there would be more hope of a satisfactory outcome."

Other suggested subjects for airing at the convention are listed as follows: a national card filing system, dealer conversion by double financing, dealer participation in the finance charge, educating the public about the finance business, outcome of Federal probes and prods in the finance field, standard cancellation notices in insurance premium financing, larger down payments in diversified financing, reduction of insurance and credit losses, sound terms and sound credit, and adequate purchaser equity.

Aug. Car Sales At Studebaker Total 2,458 Units

SOUTH BENR.—Sales of Studebaker passenger cars and trucks in August totaled 2,458, according to Paul G. Hoffman, president of The Studebaker Corp. This compares with 2,772 in August, 1937.

This brings sales for the year to date to 26,392 compared with 63,797 for the first eight months of 1937.

Willys Finances Maintained at Strong Level

TOLEDO.—In a statement issued here Friday, covering the third quarter of the current fiscal year, Willys-Overland Motors, Inc., showed a continuing strong financial position in a year which has witnessed the lowest volume of motor car sales throughout the automobile industry since 1932.

Current assets, at the close of business on June 30, 1938, the end of the third quarter of the current fiscal year, totaled $3,314,534, with current liabilities amounting to $420,189, giving a ratio of current assets over current liabilities of 7.89 to one.

This compares with a ratio of two and one-third to one at the close of the first fiscal year on Sept. 30, 1937, and a ratio of three and three-tenths to one at the close of the second quarter of the current fiscal year on Mar. 31, 1938. The company has no bank loans.

Current assets consisted of cash, $1,125,062; receivables, $135,431; inventory, $2,054,041. Net working capital was $2,894,345. Net loss, for the nine months ending June 30, 1938, was $693,841, of which $505,619 was in the third quarter. Total assets of the company at the close of the third quarter were $14,057,998.

During the summer the company announced a reduction in delivered prices on all Willys passenger car models made in recognition of the general economic trends governing retail sales.

The company is not actively engaged in extending its distributor and dealer outlets in both the domestic and export fields in anticipation of an expansion in automobile sales during the coming year.

Announcement of the Willys line of passenger cars for 1939, which will reflect the logical development of the advanced engineering principles pioneered by Willys, two years ago, will be made at the time of the New York automobile show early in November, it was announced at the factory.

Steel Operations Hit 47% Mark In Youngstown

YOUNGSTOWN, O.—Youngstown district steel operations soared to 47 per cent of capacity this week after the Labor Day shutdown.

Of the valley's 83 open hearths, 41 started production Tuesday. Ten blast furnaces will be on the active list and all three Bessemer converters will produce steel.

Resumption of the steel making at the 47 per cent level, high point since early fall last year, will place at work in the steel mills more men than have been working in the plants at any time this year.

Youngstown Sheet and Tube Co. is operating its converter this week, and the company will add an open hearth at its Brier Hill plant to balance suspension of the one open hearth at Campbell.

Carnegie Illinois Corp. is adding an open hearth at Sharon. Sharon Steel is adding one at Lowellville.

With the new steel rate, the Youngstown district continues to lead the country, being several points ahead of the production rate in other steel centers.

Mill officials, exhibiting an optimistic attitude, expected a sharp increase in orders after Labor Day from the automobile industry.

Holiday Cuts Steel

NEW YORK.—The operating rate of steel companies, having 98 per cent of the steel capacity of the industry, was 39.9 per cent of capacity for the week ending Sept. 10, compared with 44.0 per cent one week ago, 39.4 per cent one month ago and 71.6 per cent one year ago, according to American Iron and Steel Institute.

William Ogg Fitzgerald's famous cartoons appear exclusively in Automotive News.

Coming Events

SEPTEMBER

13-14—Alexandria Bay, N. Y. Empire State Automobile Merchants Assn. Inc., Annual Conclave.
14-16—New York. National Transportation Engineering Meeting.
30-Dec. 2—SAE National Production Meeting.

OCTOBER

6-7—Tulsa, Okla. SAE Fuels, Lubricants Meeting.
10-12—New Orleans. National Assn. of Independent Tire Dealers. Annual convention.
13-15—Los Angeles. SAE National Aircraft Production Meeting.
15-23—Prague, Czechoslovakia. Automobile Show.
31-Nov. 2—Detroit. American Trucking Assns. conclave. Hotel Statler.

NOVEMBER

3-10—Hartford, Conn. Automobile Show.
11-17—New York. National Motor Truck Show.
11-18—New York. National Automobile Show.
11-18—Pittsburgh. Automobile Show.
11-19—Detroit. Automobile Show.
11-19—San Francisco. Automobile Show.
12-18—Columbus, O. Automobile Show.
12-19—Chicago. Automobile Show.
12-19—Philadelphia. Automobile Show.
12-19—Boston. Automobile Show.
12-19—Milwaukee. Automobile Show.
12-19—Buffalo. Automobile Show.
12-19—Minneapolis. Automobile Show.
12-20—Los Angeles. Automobile Show.
13-19—St. Louis. Automobile Show.
14—New York. SAE Annual Dinner, Commodore Hotel.
14-16—New York. SAE National Transportation Engineering Meeting.
14-19—Elmira, N. Y. Automobile Show.
14-19—New Haven, Conn. Automobile Show.
19-25—Indianapolis. Automobile Show.
19-26—Baltimore. Automobile Show.
19-26—Rochester, N. Y. Automobile Show.
19-26—Washington, D. C. Automobile Show.*
19-26—Montreal. Automobile Show.
20-26—Cincinnati. Automobile Show.*
26-Dec. 3—Newark. Automobile Show.
26-Dec. 3—Kansas City. Automobile Show.

DECEMBER

5-10—Chicago. Automotive Service Industries Show, Navy Pier.
5-10—Denver. Automobile Show.
8-9—Chicago. National Wheel and Rim Assn. Annual Conclave.

JANUARY

9-13—Detroit. SAE Annual Meeting.

N.B.—Omaha has voted not to hold an automobile show this year.

*Tentative.

AUTOMOTIVE STOCK QUOTATIONS

At Close of Markets, Friday, September 9

(Furnished by Wm. C. Roney Co., Detroit)

1938 High	1938 Low	NEW YORK	Last Sep. 9	Sale Sep. 2
54½	34¼	Allis Chalm.	48⅝	49⅜
32¼	12⅝	Amn. C&F	24½	26⅛
22¾	9½	Amn. Chain	20¼	19¾
24½	8⅝	Bendix Avia	22¼	22⅜
65⅞	39¾	Beth. Steel	57⅛	58⅞
36⅛	16½	Borg-Warner	33⅛	34
37⅜	12¾	Briggs Mfg.	35	35½
6¾	3¼	Budd Mfg.	5¼	5⅜
5⅝	3	Budd Wheel	4¾	4½
77⅝	35⅜	Chrysler	72⅝	74½
27	10⅝	Clark Equip.	22¾	.....
38¾	13¼	Collins & Aik.	35⅛	35⅜
51½	23	Com. Credit	48¾	50
56	31½	Coml. Inv.	51	53½
1¾	⅞	Contl. Mtrs.	1⅛	1⅛
6	3¼	Curtiss-Wright	.....	5⅛
24¾	12⅝	Curtiss-W. A	21⅜	21¾
135¾	90½	du Pont	131¼	131¾
23⅜	10½	Eaton Mfg.	21	22
33⅜	13¼	Elec. Auto-Lite	31⅞	29⅝
31¼	21¾	Elec. Stor. Bat.	.....	30
15⅛	5¼	Evans Prod.	14¼	12⅛
5⅞	2⅛	Federal Mtr.	4⅞	5
25⅛	16¼	Firestone	21¼	22
2¾	1¼	Gabriel Co. A	2⅛	.....
45½	27¼	Gen. Elec	41¼	42¼
50⅛	25½	Gen. Mtrs.	46½	48¼
27¼	13	Glidden	21⅝	22½
25¾	10	Goodrich	23⅛	24
30¼	15⅛	Goodyear	28	28¾
2	¾	Graham-Paige	1⅜	1⅛
3¼	1¼	Hayes Body	3	.....
17⅜	6	Houd.-Hersh. B	16⅛	16⅛
10	5	Hudson Mtr.	8⅝	9
1⅞	½	Hupp Motor	1⅛	1⅛
70	48	Inter. Harv.	60	61¾
99¼	58	Johns-Manville	97½	96¼
13⅜	4¾	Kelsey-Hayes	.....	11½
9	3	Kelsey-Hayes B	8⅛	.....
23⅞	10¼	Lee Rubber	22½	22
54⅝	23¼	L-O-F Glass	52¼	52½
29	16	Mack Trucks	26¾	25½
28⅞	15¼	Midland Steel	.....	25
22¾	10½	Motor Prod.	19¼	20⅞
15	8	Motor Wheel	13¾	13¾
10¼	4	Murray Corp.	8⅞	9⅜
12½	6¾	Nash Kelv.	9⅝	10
19⅞	9¼	Pacific Mills	.....	15
5⅞	3¼	Packard	4⅞	5
3	1½	Reo Motor	2	2⅛
20⅞	11¼	Republic Steel	17¾	18⅛
16⅜	10¾	Socony Vac.	12⅞	14
17¼	7¾	Spicer Mfg.	15½	.....
12⅛	6	Stewart-Warner	10¾	11¼
8⅞	3½	Studebaker	7⅝	8
5⅜	2⅜	Thermoid Co.	4¼	4½
20	8⅛	Thomp. Prod.	18¼	18¼
16	8	Timken-Det. A.	14½	14½
52¾	31¼	Timken Roll. B.	48½	48¼
24¼	13½	U. S Ind. Alco.	21	21¼
48	21	U. S. Rubber	45½	45½
109⅞	61¾	West'house	100½	103¼
15¼	6⅛	White Mtrs.	12¾	13¼
3	1¼	Willys	2⅜	2⅝
21⅝	8⅜	Yellow Truck	19	19½
25⅞	9⅜	Young S & W	23	24
		CHICAGO		
1⅜	⅞	Asbestos Mfg.	1	1
24⅝	8¾	Bendix Avia.	22	22
36	16½	Borg-Warner	33	33¾
17	5⅞	Houd.-Hersh. B	16⅛	16
21½	18	Modine Mfg.	24	24
29	22	Perfect Circle	28	28
1¼	½	Pines Winter.	⅝	⅝
5½	2¾	Woodall Ind.	4½	4
		DETROIT		
16	9	Ex-Cell-O	15	.....
14⅛	6	Federal Mogul	13	.....
15	8½	Motor Wheel	13¼	15
10⅛	4⅛	Murray Corp.	9	9½
3½	1¼	Penn. Met.	2⅛	2¼
16	8¼	Timken-Det.	14⅝	.....

Sparks

By Chris Sinsabaugh

(Continued from Page 1)

table printed herewith the announcement dates of the 1938 models:

Hupmobile	Sept. 11
Studebaker	Sept. 18
Willys	Oct. 2
Packard	Oct. 2
Bantam	Oct. 2
Dodge	Oct. 9
Oldsmobile	Oct. 9
Hudson	Oct. 16
Nash	Oct. 16
Buick	Oct. 16
Chevrolet	Oct. 23
Pontiac	Oct. 23
Plymouth	Oct. 23
Cadillac	Oct. 23
Lincoln—Zephyr	Oct. 23
Chrysler	Oct. 23
De Soto	Oct. 23
Ford	Oct. 27
Pierce Arrow	Oct. 27

* * *

THE PASSING of Roy Pelletier, Ford's first advertising manager and for three decades a dynamic figure in the automobile industry, a perennial just as vivacious and brimming over with energy up to his last illness as when I first met him 30 years ago, recalls one of his greatest publicity stunts.

It was when he was publicizing the Flanders electric at a time when the electric was trying to stage a comeback after earlier popularity. The one great drawback to this was the mileage limitations of this type of vehicles. Fifty miles on one charge was just about the limit and then the batteries had to be recharged. For city work though the electric was almost as good as a gasoline rig.

* * *

TO DEMONSTRATE the improved mileage because of better batteries, Pelletier took over the job of laying out the route for one of the earlier Glidden tours promoted by the American Automobile Assn., no easy job that even for even a gasoline car, for the Glidden tours of those days covered at least 1,500 miles. But Roy sent out a Flanders electric in which rode Trailblazer Dai Lewis, still manager of the Buffalo Automobile Club. The Flanders went the route, but it still is a deep secret how the feat was accomplished. But Roy got nation-wide publicity for the stunt and electric stock went up several notches.

* * *

TIED IN WITH this reminiscence is a bit swiped from a recent issue of the Detroit News which recites that the sole survivor of what was once a flourishing branch of the automobile industry is the Detroit Electric Mfg. Co., operated since the death of A. O. Dunk by A. F. Renz, who is building about 10 of these vehicles a year. Renz is getting ready for a new model, a light rig which is to sell around $1,200.

* * *

GOING BACK to 1930 when I came to Detroit and started writing "Sparks" for the Automotive Daily News, I find in the old scrap book a column I wrote about the decadence of the electric. At that time there were two other makes besides the Detroit — Rauch & Lang, and Milburn. Even then one had to write reminiscently about the electric, so the column commented on the fact that at one time there were 36 makes of electrics and that the juice-box was putting up a gallant fight against the encroachment of the gasoline car and the steamer.

* * *

IF YOU CAN bear with me a little longer, I'd like to refresh the memories of the old timers. The Woods electric, made in Chicago, was the pioneer and when Norton H. Van Sicklen was promoting the annual Chicago bicycle show in 1898 he proved how progressive he was by including an automobile section, hidden away on the third floor of the building at the southeast corner of Wabash and Monroe, where three Woods electrics were displayed. And when the first Chicago automobile show was staged in the Coliseum in 1900 by Samuel A. Miles there was a small board track on which operated a small fleet of electrics, which gave free rides to the spectators. Many a Chicagoan got his first automobile ride at that time.

* * *

FROM THIS humble beginning developed the electric vehicle section of the automobile industry. Studebaker's first car was an electric and among the well known makes of that era were Col. A. A. Pope's Columbia, Riker, National, later a gas car; Waverley, Baker, Rauch & Lang, Ohio, Chicago, Argo, Columbus, Babcock, Broc, Kimball, and Hupp-Yeats.

Since those days better mileage can be had out of modern batteries and instead of it taking eight hours for a recharge the job can now be done much faster, so the Detroit enterprise isn't so bad. Ten or 12 jobs a year at a fairish price are not to be sneered at, especially as Brother Renz's overhead must be low. There are still elderly people who enjoy riding in electrics, which are easily handled in traffic. And there are many big estates throughout the country where they are still used.

Chrysler Shows '39 Line To Distributors, Dealers

DETROIT.—Chrysler's 1939 line was presented to the distributor body in a series of five meetings completed this week. Sessions were held in Asheville, N. C., Atlantic City, Chicago, Kansas City and San Francisco. More than 2,500 distributors and dealers attended.

The meetings were conducted by a group of 11 factory executives, headed by Joseph W. Frazer, vice-president in charge of sales; Charles L. Jacobson, sales manager; Earl B. Wilson, S. W. Munroe and Joseph E. Bayne, directors of sales, and Arthur E. Tongue, director of advertising and sales promotion.

At each meeting, two of the 1939 cars were shown and their many new features explained. Distributors and dealers were enthusiastic over the appearance of the cars and the many mechanical improvements introduced.

The object in holding these meetings was to give the dealer body the earliest possible opportunity to see the merchandise with which they will bid for 1939 business; also, to give the factory an opportunity to base early production estimates on the orders received.

Orders greatly exceeded expectations, many dealers making an original commitment for as many cars as they sold in the entire 1938 model year. This is interpreted to mean not only that the dealers are enthusiastic over the cars, but also that they look for a decided upturn in automobile sales with the introduction of 1939 models. Covering the country from coast to coast as it did, the series of meetings everywhere developed this same optimistic note.

This series of meetings was held primarily for distributors, but dealers were permitted to attend and hundreds took advantage of the opportunity. It will be supplemented by meetings in distributor points.

Bantam to Go On Full Time Basis Monday

BUTLER, Pa.—Bantam swings back into full time production next Monday, after operating for the past six weeks on a reduced schedule, according to Roy S. Evans, president of the American Bantam Car Co.

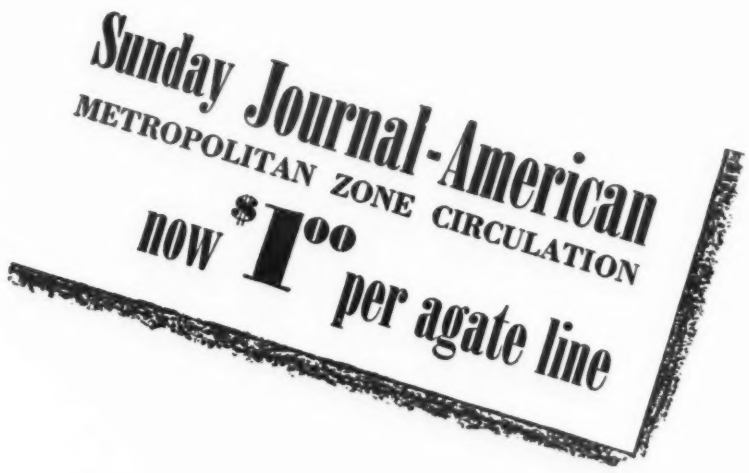
"Increased floor space in the body building division has been added in order to take care of construction of the new body models recently announced," Evans said.

THE Crescent Insulated Wire and Cable Co. of Trenton, N. J., has no New York City office; yet any of the company's customers or agents in New York are connected at once with Trenton headquarters by calling a New York number. It's just like making a local call. The call goes direct to the switchboard in Crescent headquarters over a special Private Line Telephone circuit between New York and Trenton.

Thus Crescent functions almost as though it were located in the heart of the highly competitive New York market. The firm's selling agents and customers can discuss orders *personally*, as if the Crescent offices were just around the corner.

This Private Line Telephone Service was installed through a joint communication analysis by Crescent and telephone representatives. *Your* business may profit as well by similar Bell System special services. Why not ask your local telephone office to send a Bell System representative? He'll gladly help you size up your set-up.

TO SELL YOUR NEW MODEL in the New York market, put this new model Journal-American behind it! Double traction with the assets of two great newspapers! And the largest evening circulation in America, to put the selling pressure on the districts where the new cars are bought! With forty years of friendship and influence with the New York public—real pull that makes good car advertising sell good cars to good customers! And price cut to put 25% more power in your advertising dollar this season, the Journal-American stands out as the best advertising buy in your best market. Book show and Post-Show schedules now!



NEW YORK JOURNAL-AMERICAN

Represented nationally by: HEARST INTERNATIONAL ADVERTISING SERVICE *Rodney E. Boone, Gen. Manager*

Offices in NEW YORK • CHICAGO • DETROIT • BOSTON • ROCHESTER • PHILADELPHIA
PITTSBURGH • SAN FRANCISCO • ATLANTA • LOS ANGELES • SEATTLE • BALTIMORE

AUTOMOTIVE NEWS 1938 ALMANAC ISSUE

ANNUAL REVIEW and REFERENCE NUMBER

FOR THE AUTOMOTIVE INDUSTRY

FIFTH YEAR

$4.00 PER YEAR
(Including Year Book Number)
•
Year Book Number only
$2.00 EACH

Annual Almanac Issue of

Automotive News

"The Newspaper of the Industry"

DETR[illegible]tember Tenth, 1938 (Second Section)

This *is our die*

THIS is the tool with which one man —in one minute—can stamp out ten million sharp, lasting impressions. Each different. Each perfect.

A man talks into this microphone about an automobile. Instantly, at the other end of the mike, the minds of ten million people paint *the most exciting automobile pictures in the world!* For each listener sees *himself* in a car—in a model *he* wants—in the colors *he* likes best.

That is radio's power; its power to paint personalized pictures in the mind; its power to fire the imagination of the millions of people it reaches.

Eighteen hundred years ago, Pliny said: *"The living voice moves men."* It moves merchandise, too. And if you have not seen the most recent facts on radio's ability to picture and *sell* automobiles, as it sells silver and soap and cigarettes, may we send them to you?

Columbia Broadcasting System

THE WORLD'S LARGEST RADIO NETWORK

The Fifth Almanac

YOU remember the old wheeze about the farmer who hitched his fancy bull to the plow "just to prove to the critter there was something else in this world besides pleasure!" Well, getting out this Fifth Edition of the ALMANAC proved just that to ye editors and ye advertising men who make it possible. We found that most of the sources from which we secure our data and our advertising patronage were not anxious to talk about the year that was past. They wanted to change the subject. They were already knee-deep in plans for 1939!

* * *

But year books must be issued annually. The publication of such an important volume of reference to so great an industry carries with it a responsibility which cannot be shirked even if one would prefer to do so. So we rolled up our sleeves, sweat copiously during the torrid days of July and August and here in your hands is the result of our labors.

* * *

We honestly believe it is better, more complete and more interesting than any of the four editions which have preceded it. Perhaps we are doting parents who cannot see the offspring's faults, but anyway, "here 'tis and we hope you'll like it!"

At your service always,

Chris Sinsabaugh
Editor

Geo. M. Slocum
Publisher

This Automotive Almanac is furnished only to paid subscribers and is intended exclusively for their use. The right to reprint or use any statistics herein for any other purpose is reserved exclusively by the publishers and violators of this privilege will be prosecuted. While all facts and figures are secured from reliable sources and every care is exercised to make all parts herein correct, the publishers will not be liable for mistakes or errors in their compilation, but will rectify in future editions, any error brought to their attention.—SLOCUM PUBLISHING COMPANY.

(Entire contents copyright, 1938; all rights reserved)

The MOTOR INDUSTRY

An Extraordinary Accomplishment Made Possible by Merchants and Manufacturers Working Together in a Great Nation . . .

IN 1900 the horse and buggy along rutted roads was our characteristic national means of individual transportation. That year 4,192 passenger cars were sold . . . the beginning of a new industry.

Today, 25 millions of vehicles tie together this great nation. Over six million men and women normally are employed directly and indirectly in motor transportation.

No other land under no other government down through the thousands of years can point to such a superb record.

No one group or force engendered this startling growth. True, brilliant engineers played a part. Manufacturing genius contributed much. Astute merchandising and advertising kindled interest and impelled consumer action.

But these alone would not suffice. It demanded a land of opportunity to cradle this motor thought, nourish and promote it to vigorous manhood. America proved to be that land. America was blessed with courageous, pioneering, eager minds and hands.

This has been the spirit of both motor merchant and motor manufacturer. Both have prospered in this vigorous and dynamic industry, because both have been able to operate their business not only with a sense of freedom, but also with an opportunity to win the rewards of individual enterprise.

Isn't it time to pause and appraise what their fortitude and tireless energy have contributed during these decades? When schemes are proposed which may shackle the automobile industry, every man should ponder these pertinent facts.

Too often men across the world have failed to appreciate fully a happy and profitable and free environment. Too often they have failed to protect the things that have assured their own successful lives.

There is food for thought in the idea that the progressive and natural evolution of the manufacturing and merchandising plans and methods of this industry has enabled the industry's merchants and manufacturers, cooperating with each other, to accomplish the extraordinary job of placing over 50 millions of vehicles on the roads of the world since 1900.

There is food for thought in the idea that this evolutionary process which we know has worked may likewise be the best way to perpetuate the happiness and success of all of us in the promising years which lie ahead.

PLYMOUTH
PASSENGER AND COMMERCIAL CARS
DODGE
PASSENGER CARS AND TRUCKS
DE SOTO
CHRYSLER

Chrysler Corporation

Chrysler Marine and Industrial Engines • Airtemp—Air Conditioning

YOU GET THE GOOD THINGS FIRST FROM CHRYSLER CORPORATION

FIFTH ANNUAL EDITION OF THE AUTOMOTIVE ALMANAC for 1938

CONTENTS

(See Complete Index Facing Inside Back Cover)

Car Makers' Chronology—a tabloid history of leading car producing companies.

Complete passenger car registrations, 1930 to 1937.

Detailed directory of the Industry, listing company addresses, officers, products manufactured, advertising agencies, etc.

Automotive News Family Album.

Financial data of automotive companies.

Used car sales and stocks analysis for 1937.

Commercial car registrations, 1930 to 1937.

Monthly production and registrations statistics showing percentage of each month to year's total, 1929 to 1937.

Percentage of state registration to year's total, 1931 to 1937.

Maker's percentage of year's total new passenger and commercial car registrations, 1931 to 1937.

Production and wholesale value of passenger and commercial cars, 1900 to 1937.

Motor vehicle inspection laws for 1938.

List of states in order of registrations—in order of percentage of sales increase, 1936-1937.

List of manufacturers in order of sales volume—in order of percentage of sales increase, 1936-1937.

Department of Commerce production figures.

Automotive News production estimates by makes, 1936-1938.

Safety glass regulations.

Analysis of Automobile Financing.

Export activities, 1937-1936.

Motor vehicle registrations, 1895 to 1937.

Sales of motor vehicles outside the United States.

Parts and tube production statistics.

Tire and tube production statistics, 1929 to 1937.

Founded in 1925 as Automotive Daily News

Automotive News

The Newspaper of the Industry

Published Every Saturday at

DETROIT, U.S.A.

Fifth Floor, New Center Bldg. **Telephone Trinity 2-3500**

GEORGE M. SLOCUM
Publisher

CHRIS SINSABAUGH
Editor

B. B. CRIGHTON
Business Manager

WILLARD C. COTTON
Advertising Manager

WILLIAM C. CALLAHAN
Managing Editor

Chicago Office:
MELVIN J. ADAMS, *Manager*
307 N. Michigan Ave.
Telephone Franklin 2508

J. C. WEED
COLIN M. SELPH
Special Representatives

New York Office:
EDWARD KRUSPAK, *Manager*
51 East 42nd St.
Telephone Murray Hill 6-0104

Entered as second-class matter at post office, Detroit, under Act of March 1, 1870

This large globe in the Ford Rotunda at Dearborn shows the world-wide scope of Ford activities.

We have had just one main purpose during these years, and that is to give the people transportation of the most dependable quality at the lowest possible cost. Our car was called "The Universal Car" 30 years ago, because it fulfilled so many needs; it is "The Universal Car" today for the same reason.

Henry Ford

THE UNIVERSAL CAR

One name comes quickly to mind when mention is made of "The Universal Car." The description is distinctively Ford. No other car is used by so many millions of men and women in every part of the world. Everywhere it is the symbol of faithful service.

As you read this, more than 10 million Ford cars are in service in this country. Many are on the main highways. Thousands of others, in rugged, difficult country, furnish dramatic examples of the range of usefulness that makes the Ford "The Universal Car."

In other lands, millions of Fords are on the road—on trails that will become roads—in deserts where roads will never be.

Daily they make news. "Ford V-8 wins 3868-mile Grand Prix competition in Argentina." "Ford V-8 wins Monte Carlo rally, Europe's greatest road contest."

Two men and a dog in a Ford make the first crossing of South America by car, sweltering through jungles, freezing in the Andes.

A young couple, crossing the Sahara in a Ford, meet a party from Belgium in three Fords, heading for the Congo.

News comes of Fords working in New Guinea gold fields. Serving mining camps in Alaska. Adapted as a rail car in Honduras.

The Ford has to be good, because so many people ask so much of it—and because so many of them are what we call "marginal users"—owners who ask their cars to do things the ordinary motorist would never undertake. The Ford attracts more than its share of such buyers.

Why? Because an extra margin of sturdiness, reliability and long life always has been built into the Ford. It is there—a surplus to draw upon in emergencies.

The average owner may never push his Ford to punishing limits, but he benefits by "marginal" quality too. For him it shows up over the years in trouble-free performance, low up-keep and enduring satisfaction.

This reserve of quality is one of the obligations of building "The Universal Car" . . . and one of the reasons why 26 million Fords have been bought.

Ford

FORD MOTOR COMPANY

Founded in 1925 as Automotive Daily News

Automotive News

The Newspaper of the Industry

--in the rear-view mirror

By CHRIS SINSABAUGH

PEERING INTO the rear-view mirror, an annual custom of mine since the Automotive Almanac came into being in '34, I find plenty of facts and figures about the industry's operations in '37 to round out a column. Thirty-seven was colorful and had it not been for the tail-spin that came along in the last two months, and earlier labor troubles, the high-water mark of '29 for production and sales might have been closer approached. The start of the depression, recession or what have you, caused the brakes to go on, but the momentum of 10 unusual months was such that '37 finishsed as runner-up to the greatest year the industry ever has enjoyed—1929, which has been our all-time yardstick.

* * *

JUST TO PROVE to you how close last year came to the banner twelve-month, the column points out that in 1929 the combined production of cars and trucks totaled 5,621,715 and in 1937 the count was 5,016,437.

As I write this, early in September, I can look back over the first nine months of '38 and observe what a false yardstick '37 was. We, in making our comparisons, have based them on what was done last year, whereas '37 was such an abnormal year that our rear-view mirror was befogged. Had we drawn our conclusions from what was done in what might be styled the normal years of '34 and '35 we wouldn't have thought the industry was going to the dogs in '38. As a matter of fact the year we now are in might well be stacked up with '32 when the total production reached 2,472,359. I doubt if '38 reaches that but the count will be close enough to make this year comparable.

* * *

THE SALES SPURT that started in June, July and August of this year came a bit late to quite reach '32, but it had one good effect. It pepped up everybody. Floor stocks were reduced to more than normal, while the used car situation, in my opinion, is the best we have had in years. Possibly the used-car week staged by the industry as a whole is largely responsible for this and perhaps too dealers are getting wise to themselves and not making as many foolishs trades as they used to. Anyway, the combination has brought about a clean-up of later-year models.

* * *

IT IS FORTUNATE that this inspirational pick-up came as it did, for it has generated an enthusiasm in the trade for what lies ahead of us in '39. Factories are now runninng on next year's models, and the general public seems to have gotten over its blue funk and is coming into the market more freely. If I dared predict, I would say that for the balance of this year, starting in October, many of the new product will have been disposed of by the turn of the year, And in '39 considerable slack will have been taken up and I'd guess the year will be a normal one.

* * *

BUT WHILE I HAVE been looking through the windshield at '39 it begins to look as if I had neglected to complete my job of rear-mirror gazing. So I will go into reverse and talk some about '37 and some about '38. As to '37, outside of the abnormal production and sales, the year stands out because of the labor troubles which, when they were at their worst in the spring, threatened to upset the applecart. It looked dark indeed at the end of the first quarter, but once over that hump, things began to happen. We were back on the main road again and if it had not been for the strikes it would have been almost certain that '29 would have become a discarded yardstick.

* * *

AT THIS WRITING labor is quiescent and the unions are fighting each other. Even the Wagner law, which has been deemed decidedly one-sided and unfair to the employers, is likely to be so amended that it may become workable.

* * *

AS A CONSEQUENCE of the labor wars, the '38 models showed little change, which probably is one of the reasons why more of them were not sold. Few mechanical changes were made but there was one contribution that was made that will make one of the '39 features—the remote gearshift. This was used on several different makes in '38 but from where I am sitting it looks as if this type of transmission will become almost universal for the new crop.

Big Increase in Sales Seen for '39

Latest Demand, Due to Lack of Buying in '38, Leads to Expectations Of 25-30 Per Cent Rise Next Year; Plants Spend Millions to Stimulate 1939 Market; Consumer Fear is Rapidly Changing into Confidence

By WILLIAM C. CALLAHAN

WITH a bad 1938 under its belt the automotive industry this fall looks forward to 1939 with renewed optimism. This confidence that next year will bring rewards that will offset the disappointments of 1938 is not based upon hopes alone. Several factors now affect the market which, while giving no positive assurance, do indicate a reasonable expectation of an increase in sales ranging from 25 to 30 per cent above the year just closing.

Chief among these factors, perhaps, is that the country this year did not spend for automotive equipment anywhere near what our national income figures would indicate it had every reason in the world to spend. This means that there is a strong demand for cars still in existence and backed by purchasing power which needs only a return of confidence to make itself manifest.

To stimulate this demand, and to help further a return of confidence, the automotive industry this year has incorporated more changes in its models and spent more for dies, tools, jigs, equipment and machinery with which to launch its 1939 lines than it has done for years past. The result is the 1939 cars will hold appeal for the average buyer which will be difficult to resist, particularly in view of the fact that many persons, normally new car buyers, still have the money and income with which to buy, and good indications that those incomes will continue or grow larger.

Looking at the picture from a national income standpoint, in 1929 when the national income ran to 78½ billions of dollars the wholesale value of all motor vehicles produced in the United States reached $3,413,000,000. This represented about 4.4 per cent of the national income. In 1930 with the national income declining to 73 billion dollars, cars production dropped to two billion or about 2.8 per cent of the income. This downward movement continued until 1932 when the wholesale value of motor vehicles represented only 1.4 per cent of the national income.

With the advent of business recovery in 1933 automobile production rose but did not begin really to catch up with income until 1935 when the wholesale value of motor vehicles accounted for 3.7 per cent of the total income. In 1936 motor vehicle value represented 3.96 per cent of the national income and by 1937 had climbed to 4.1 per cent of the national income.

While the 1937 figures were getting back pretty close to 1929 there still remained a considerable market which had not been filled at that time. On the other hand, it must be considered also that the prices of cars were sharply down from 1929 so that even though the industry had almost tied its previous record numerically it had not reached the same level in wholesale value.

When 1938 came into the picture estimates show that national income was pretty well sustained, in spite of the recession, while automobile sales skittered off sharply. Best guesses have placed the current year's national take at $57,000,000,000 or somewhere in that neighborhood. Car production wholesale value is not expected to reach more than $1,327,000,000 for the calendar year. The nearest comparable year in the past 10 from a national income standpoint was 1935 when the total for the country reached $55,137,000,000. In that year the wholesale value of motor vehicles produced in this country was put at $2,089,000,000 or 3.7 per cent of the income. This year the industries $1,327,000,000 will represent only about 2.3 per cent of the national income which when compared with 1935 means that many people who were in a position to buy this year *just did not buy.*

Part of the reticence on the part of buyers must be charged to a reluctance on their part to exchange 1937 models for cars which had been only slightly changed in 1938. Coupled with this also is the fact that 1938 cars were in most cases priced higher than in 1937. Chiefly, of course, the shrinkage in sales this year must be be charged to fear and uncertainty, the causes for which, and the reasons therefore, were far less real than the fear itself.

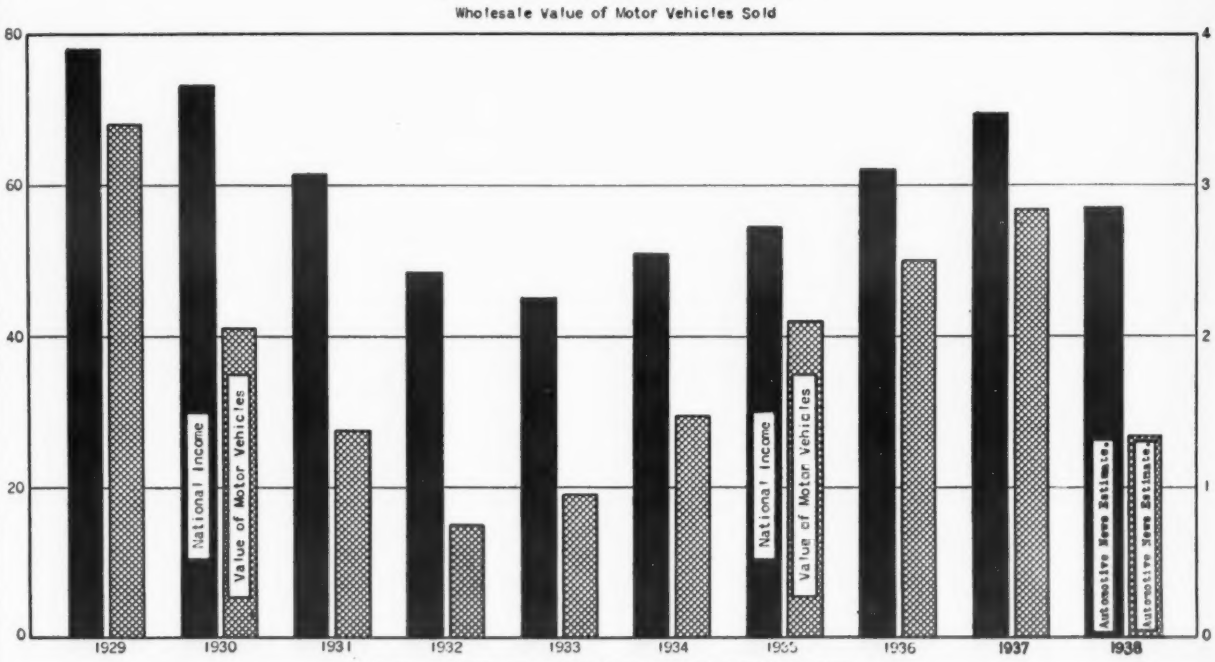
But taking all these factors at the net worth there seems every reason to believe that confidence is rapidly replacing fear. National income figures indicate a definite lag between income and outlay for automobiles. Prices are likely to be as low, if not lower, than in 1937 and changes in automobile design and engineering are sufficiently marked, without being radical, to stimulate a desire to own a new car.

Then there is the ever present boogey of "saturation." This queer word meaning that we have sold all the cars the country can possibly absorb, first made its appearance in the automotive dictionaries back in the early 20's. At that time there were less than 20,000,000 vehicles registered in this country. Today there are 30,000,000. Expert projectors have pointed toward 1950 with the fond hope that before that time registrations will have topped 45,000,000.

After all, then, there seems every reason to feel that the projection of 25 to 30 per cent increase in 1939 over 1938 is well justified.

NATIONAL INCOME & AUTOMOBILE SALES

Total National Income Paid Out Compared With Wholesale Value of Motor Vehicles Sold

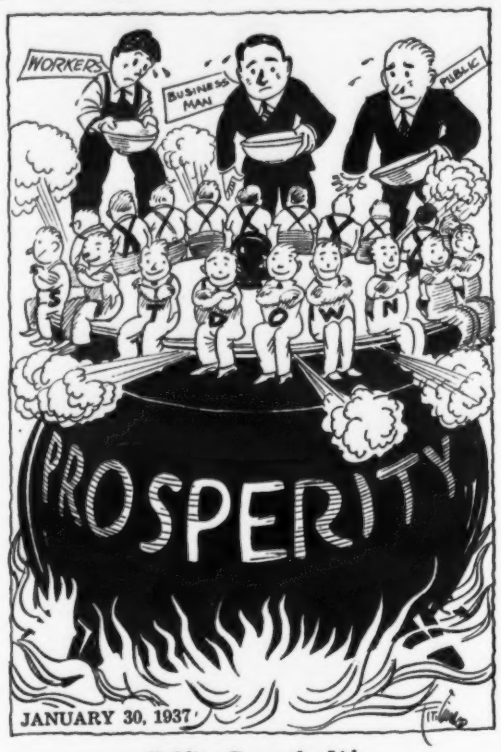


Source - National Income from Bureau Foreign & Domestic Commerce
Motor Vehicle Wholesale Value from Automobile Mfrs. Assn.

FITZ'S CARTOONS SPEAK LOUDER THAN WORDS

A SELECTION FROM the SERIES by OGG FITZGERALD APPEARING EXCLUSIVELY in AUTOMOTIVE NEWS....

Wipe off the Steam



Holding Down the Lid

Wishbone Gets the Worst of It

David and Goliath

Good to the Last Drop

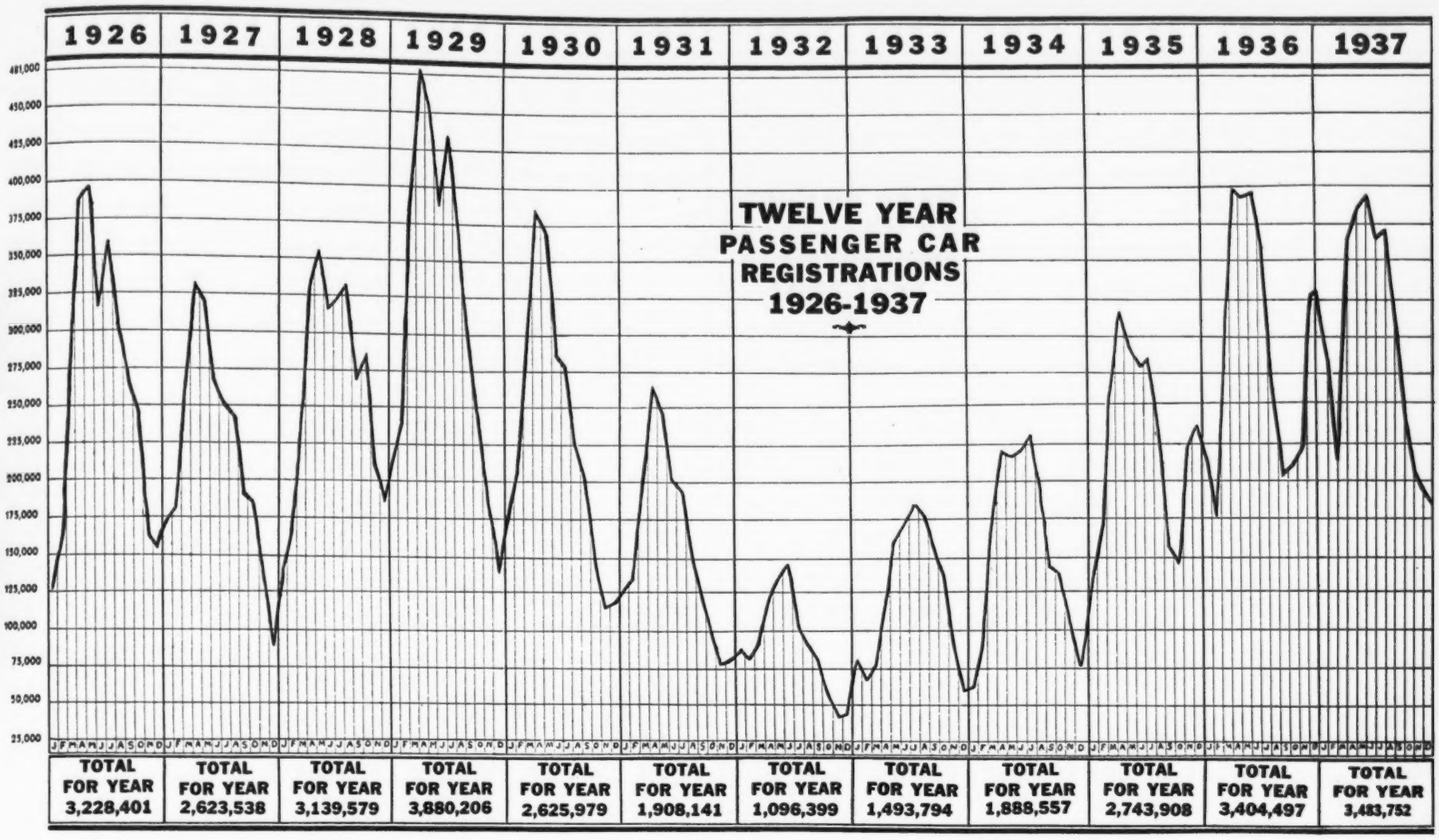
"—Where Angels Fear to Tread!"

Wisconsin—a Laboratory

The Proverbial Needle's Eye

Ogg FitzGerald —New York

The Cobbler's Kid



Automotive Vital Statistics for 1937

Production

	1937	1936
World production motor vehicles	6,352,998	5,771,597
U. S. production	4,808,974	4,454,535
U. S. per cent of total	77.7	78.9
Canadian production	207,463	162,322
Canadian per cent of total	3.27	2.81
Other countries production	1,336,561	1,154,740
Other countries per cent of total	21.04	18.29

Production Passenger Cars and Trucks

	1937	1936
U. S. passenger cars, total	3,915,889	3,676,063
U. S. passenger cars, domestic	3,643,386	3,458,068
U. S. passenger cars, foreign	272,503	217,995
U. S. trucks, total	893,085	778,472
U. S. trucks domestic market	689,674	649,973
U. S. trucks, foreign market	203,411	128,499
Canadian passenger cars	153,046	131,308
Canadian trucks	54,417	31,014

Total Motor Vehicle Registrations

Total as of December 31

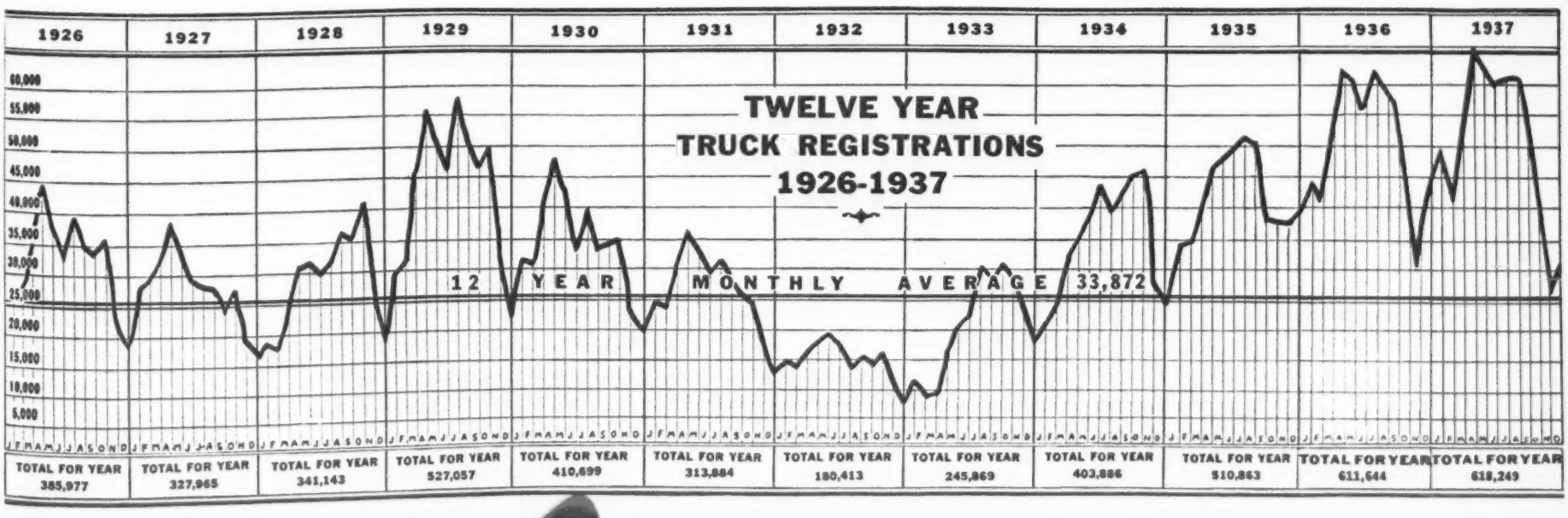
	1937	1936	Increase %
World registrations	42,677,948	40,557,861	5.2
U. S.	29,705,220	28,520,559	4.2
Canadian	1,319,702	1,240,124	6.4
Other countries	11,653,026	10,803,231	7.8
U. S. total passenger car registrations	25,342,525	24,373,053	3.9
U.S. total truck registration	4,362,695	4,023,606	8.4
Canadian total passenger	1,103,012	1,041,529	5.9
Canadian total truck	216,690	198,595	9.1

New Car and Truck Registrations

	1937	1936	1935
U. S. passenger	3,483,752	3,404,497	2,743,908
U. S. truck	618,249	611,644	510,683
Canadian passenger car	114,275	92,287	83,242
Canadian truck	30,166	21,027	18,219

Miscellaneous

	1937	1936
Average number of wage earners employed in automobile and body plants	517,000	460,000
Total earnings of wage earners in automobile body plants	$ 806,000,000	$676,000,000
High pressure casings	3,126,173	3,754,429
Balloon casings	41,654,204	43,319,814
Solids and cushions	533,930	390,899
Inner tubes	42,108,796	46,370,518
Original equipment of parts, tires, etc.	740,180,000	710,936,000
Parts, units and accessories	592,350,000	535,936,000
Rubber tires and tubes	147,830,000	175,000,000
Replacement of parts, tires, etc.	1,406,801,000	912,725,000
Parts, units, accessories and service equipment	698,055,000	654,725,000
Parts sold by motor vehicle manufacturers	363,806,000	———
Rubber tires, tubes and repair materials	344,940,000	258,000,000
Total parts and tire business	2,146,981,000	1,623,661,000
Total motor owner taxes	1,584,990,000	1,448,266,976
Automotive manufacturers' total U. S. excise tax	472,472,574	417,573,395
Total number of car dealers in U. S.	44,800	40,000



When you have the CHEVROLET FRANCHISE *you have friends*

Quality products + quality dealers + quality policies + quality sales methods = SALES LEADERSHIP

The CHEVROLET QUALITY DEALER is backed by:

- Chevrolet's Vast Resources
- Progressive Engineering Design
- Precision Manufacturing
- Advanced Dealer Policies to Protect Dealer Investments
- The Most Aggressive Sales Promotion Activities Ever Designed and Conducted
- Truck Sales Assistance from an Experienced Field Organization
- National Used Car Organization
- Expert Service and Mechanical Follow-up and Assistance
- Continuous Prospect and Sales Stimulating Advertising
- National Dealer Committee System of Operation
- Direct Mass Selling
- Progressive Parts and Accessories Programs
- School of Modern Merchandising and Management for Dealers' Sons
- Fact-Producing Sales Research Department

CHEVROLET MOTOR DIVISION, *General Motors Sales Corporation*, DETROIT, MICHIGAN

CHEVROLET

has led in car registrations in seven out of the past eight years!

CHEVROLET	1931	1932	1933	1934	1935	1936	1937	1938
CHEVROLET	1st	1st	1st	1st		1st	1st	1st*

**Year to date, latest available R. L. Polk & Company official registration figures for 1938.*

CAR MAKERS' CHRONOLOGY

Following are the 1937 additions to the chronological history of most of the motor car manufacturing companies, which have appeared in past issues of Automotive Almanac. For years previous to those contained on this page, Automotive News suggests that reference be made to the 1937 Almanac. Automotive News takes credit for the compilation of this chronology, which has been brought about directly through the initiative of this publication. However, only through the co-operation of the several companies contributing their data has this history been possible. Automotive News assumes no responsibility for priority claims made in the "milestones" column, which in each case are made by the company itself.

American Bantam

Year	Type of Cars Produced	Total Sales	Body Styles	List Price	No. of Employes	Milestones
1937	4-cyl. "60"	2,500 to date in 1938	Roadster Coupe Panel Pickup	$479 439 479 465	300	Production started Dec. 22, 1937. 1938—Car Productions, Pty. Ltd., Sydney, Australia, contracts for Australian Bantam plant for engine and chassis assembly and body building. Introduces first four-passenger cars, Speedster and Station Wagon. Produces new standard coupe to deliver for $399.

Buick

Year	Model	†Total Sales to Dealers	Price Range**	Fcty. Bldgs.	No. of Employes	Milestones
1936	36-37	184,802	17 models $765 to $1995		13,899	$40,000,000 expansion program completed, bringing capacity to 300,000 units annually.
1937	37-38	232,626	22 models $913 to $2453	65	16,213	Coil spring rear spring, rear suspension introduced. New Dynaflash engine featured, with domed pistons.
1938	38	5 Mos. 68,020	21 models $945 to $2453		11,466	

Cadillac

Year	Type of Cars Produced	†Total Sales to Dealers	Body Style (Typical Car)	List Price	Milestones
1937	V-8 LaS. 37-50 V-8 Cad. 37-50 V-8 Cad. 37-65 V-8 Cad. 37-70 V-8 Cad. 37-75 V-12 Cad. 37-85 V-16 Cad. 37-90	44,153	5-P. Touring Sedan 5-P. Touring Sedan 5-P. Touring Sedan 5-P. Fleetwood Touring Sedan 5-P. Fleetwood Touring Sedan 5-P. Fleetwood Touring Sedan 7-P. Fleetwood Touring Sedan	1,215* 1,660* 2,090* 2,595* 2,815* 3,535* 7,595*	All previous company production and sales records broken by 1937 models. Manufacturing advances make possible installation of V-8 motor in LaSalle at lower prices. Advertised delivered price policy adopted. Stock passenger car record for 500 miles at Indianapolis Motor Speedway falls to LaSalle with average of 82.189 miles an hour.

Chevrolet

Year	No. of Cyl.	†Total Sales to Dealers	Model and Price		Milestones
1937	6	1,189,837	Town Sed.—Deluxe	$620	Thirteen-millionth car produced July 7, 1937. M. E Coyle elected a director in, and vice-president of, GMC. Four-bearing crankshaft introduced in all motors. New Motor & Axle Plant started at Tonawanda, N. Y. National Used Car Sales Dept. organized.

Chrysler Corp.

Year	Models	Total Production All Units	Price Range Detroit Delivered Prices	Plants	Milestones
1937	Chrysler Royal Chrysler Airflow Chrysler Imperial Chrysler Custom Imperial DeSoto Dodge Plymouth Deluxe Six Plymouth Business Six Plymouth Commercial Cars Dodge Bros. Commercial Cars and Trucks Chrysler Marine and Industrial Engines Airtemp Airconditioning Products	1,158,518	Plymouth Business Coupe $580 to Chrysler Custom Imperial seven-passenger sedan limousine $2,160.	Highland Park, Mich. Newcastle, Ind. Detroit: Chrysler Windsor, Ont. Dodge Main Dodge Truck Dodge Forge Plymouth Evansville, Ind. Kercheval Dayton, O. Helena, Mont. Amplex-Harper Conant Road DeSoto Los Angeles Marysville London Antwerp Walkerville, Ont. Kokomo, Ind. McKinstry St. Lynch Rd-Truck	For the fifth consecutive year Chrysler Corp. exceeded its previous year's sales, and for the second year in its history sold more than 1,000,000 passenger cars, commercial cars and trucks in one year. In 1937 it spent almost $22,000,000 to improve production facilities at all plants; to construct a new building in Canada for machining and assembling six cylinder motors; to purchase and equip a transmission plant at Kokomo, Indiana; and to purchase and improve the site for a new truck plant in Detroit. Domestic new car registrations of Plymouth, Dodge, DeSoto and Chrysler passenger cars were 883,572 units in 1937, as compared with 851,884 in 1936. Truck and commercial car sales by Chrysler Corp. increased 13.6% and export shipments increased 18.6% over the year before. Herman L. Weckler and Nicholas Kelly were elected vice-presidents of the Corporation.

Ford

Year	Model	Total Production	Model and Price	Factory	Employes (U S Only)	Milestones
1937	V-8	1,313,879	Sedan $544	Rouge Plant	121,267	Ford led in United States sales of trucks and cars for 1937 with a combined total of 955,309 units. For 1938 Ford for the first time announces two separate models, the 85 and 60, both V-8's Announcement is made that $40,000,000 will be spent for plant expansions in 1938.

General Motors

Year	Models	Total Sales to Dealers	Price Range	Milestones
1937	PASSENGER CARS: Buick, Cadillac Chevrolet, LaSalle, Oldsmobile, Pontiac. COMMERCIAL CARS: Chevrolet, GMC Trucks FOREIGN PASSENGER CARS: Open, Vauxhall. FOREIGN COMMERCIAL CARS: Bedford, Blitz.	2,116,897	Chevrolet $590 to Cadillac $7,900	Automatic transmission introduced on Oldsmobile. Alfred P. Sloan Jr. elected chairman and W. S. Knudsen elected president of General Motors

Graham

Year	Models	No. of Cyl.	Price Range	Total Production	Location of Factories in U. S.	Total Average No. of Employes	Milestones
1937	85-95-116 120	sixes super-chgd. sixes	$690 to $1,190	21,300	Warren ave. Detroit	2,500	Leading a field of 25 cars in all price classes, Graham Supercharger wins Sweepstakes Award, and Graham Cavalier second place, in 1937 Gilmore-Yosemite Economy Run. The 1938 Grahams, introduced in November, 1937, prove style-sensational; popularly labeled, "The Spirit of Motion".

Hudson

Year	Models	Production Total	Model and Price	Milestones
1937	Hudson Custom Six, 122" w.b.; Hudson DeLuxe Eight, 122" and 129" w.b.; Hudson Custom Eight, 122" and 129" w.b. De Luxe Terraplane and Super Terraplane, 117" w.b.	Total 119,481 Hudson 20,466 Terraplane 90,053 Commercial 8,962	Hudson, 28 Models, Business Coupe, $815 to Convertible Brougham, $1215. Terraplane, 27 Models, Business Coupe, $695 to Convertible Brougham. $985(delivered price)	40 official performance records broken, under supervision of Contest Board, American Automobile Assn., before introduction to public.

Hupmobile

Year	Model	Total Production	Model and Price	Factory	Employes (U. S. Only)	Milestones
1937	G	199	Sedan 970 (Detroit del'd)		752	Company's capital structure re-organized and $2,600,000 additional capital provided.
Through Sept. 1	N	39	Sedan 1165 (Detroit del'd)			
1938	E		Sedan 1045 (Detroit del'd)		447	S. L. Davis elected president, Norman DeVaux general manager; two new low-priced lines planned for 1939.
Starting Sept. 3	H		Sedan 1325 (Detroit del'd)			

Nash

Year	Total Car Units Produced	21 Year Range of Price		Average Number of Employes	Milestones
		Lowest Base Price	Highest Base Price		
1937	86,000	$595	$965	9,000	Introduces Conditioned Air Unit, first of kind made available by any factory. Completes $2,000,000 plant expansion in all three plants.

Oldsmobile

Year	Model	†Total Sales to Dealers	Model and Price	Factory	Employes (U S Only)	Milestones
1937	F-37 L-37	*212,331	**6-Cyl., $765 **8-Cyl., $880	Lansing Linden, N. J. South Gate, Cal. (Los Angeles)	13,125	Greatest production and sales activity in company history. Employment and payroll expenditures were at new high peaks. Introduction of first successful automatic gear changer, the Automatic Safety Transmission.

Packard

Year	Total Production	Models and Price	Employes	Milestones
1937	109,518	Six 4-door Tour., $1,070 Eight 4-door Tour. Sedan $1,325 Eight DeLuxe 4-door Tour. Sed., $1,540 Super Eight 4-door Tour. Sed., $2,790 Super Eight 4-door Tour., Sed., $2,995 Twelve 4-door Tour. Sed., $4,155	16,667	Biggest production year in history of company

Pontiac

Year	Model	†Total Sales to Dealers	Models and Prices	Factory	Employes	Milestones
1937	Deluxe 6 Straight 8	231,485	8 Mod. $650 to $1,055 8 Mod. $725 to $1,095	Pontiac Linden, N. J. Southgate, Calif.	12,070	Model production of 236,000 new high for Pontiac. Station wagon and convertible sedans added to line. New apprentice school building erected. New plant administration building erected

Studebaker

Year	Model and Price		Total Sales to Dealers	Employees	Milestones
1937	Commander 6 Sed. President 8 Sed.	$745 $1015	91,475	7,842	During September, Studebaker staged the biggest introductory show and driveaway in its history. More than 7,000 dealers and salesmen came to South Bend from all parts of the United States and Canada.

White

Year	Total Production	Model and Price	Factory	MILESTONES
1937	12,118	700-800-900 series. 54, 65, 784, 786, 788, 706M, and full line of safety school bus models. $1095 to $16,750.	842 E. 79th St.	White inaugurated broad $2,000,000 expansion program. Completion of new $500,000 coach body plant. Introduction of new aluminum-bodied transit coaches. White presents the new Model 750 truck and 750T tractor.

Willys-Overland

Year	Total Sales	MILESTONES
1937	79,235	Jan. 20, 1938—Delmar G. Roos, past prasident S. A. E., elected vice-president in charge of engineering. Mar. 1, 1938—William C. Cowling, former general sales manager for Ford Motor Co., elected vice-president. Nov. 1937—Production of Willys trucks started.

Studebaker is *famous* for its "FATHER AND SON" teams of craftsmen!

The smiling Lundquists are farmers as well as craftsmen—The father is 62, the son 31, and they've got 36 years of Studebaker service behind them. They're solid citizens as well as sound workmen. Studebaker started in 1852. Working for Studebaker is an 86-year-old custom among the residents of South Bend.

Their sound, solid workmanship is one reason why every Studebaker excels so convincingly in a 10-mile trial drive!

"Studebaker craftsmanship attracts new business and keeps present owners satisfied!"

That's what Studebaker dealers from coast to coast will tell you. It's none too early to start considering Studebaker as your 1939 line.

Mail coupon below, today, for details of the fairest franchise in the automotive industry.

Miles ahead in craftsmanship. Studebaker's working force of 7,300 master craftsmen includes no transients. Friendly fellow townsmen, they have a personal stake in the success of every Studebaker that's sold. Pictured are the Lehrs, one of the many famous Studebaker "father and son" teams.

Carrying on in the name of the Kerezstes family is tool-maker apprentice Floyd C., pictured above with his father, Floyd J., who is one of the many home owners among the Studebaker craftsmen. Half the working force of 7,300 at Studebaker has been on the payroll for 10 years or more. The average age of Studebaker's master craftsmen is almost exactly 40 years.

The Bukowskis are pals at work, home and play—Louis Bukowski and his father, Walter F., do a lot of fishing after hours. Many of the Studebaker craftsmen are expert sportsmen. The Studebaker Rod and Gun Club is said to be one of the world's largest and most successful game conservation organizations.

STUDEBAKER

AMERICA'S FRIENDLIEST FACTORY

MAIL THIS COUPON TODAY

Paul G. Hoffman, *Pres.*
The Studebaker Corporation, South Bend, Ind.
Without obligation, I should like to know more about Studebaker's dealer-written franchise.

Name.....

Street and No......

City.....*State*.....

New Passenger Car Registrations, 6 Months Total, 1938-1937

Figures in this table are supplied by R. L. Polk & Co., New Jersey Motor List Co., and Sherlock & Arnold

STATE		CHRYSLER					GENERAL MOTORS							FORD			NON-AFFILIATED								STATE
		Chrysler	De Soto	Dodge	Plymouth	CHRYSLER TOTALS	Buick	Cadillac	Chevrolet	La Salle	Oldsmobile	Pontiac	GEN. MTRS. TOTALS	Ford	Lincoln	FORD TOTALS	Graham	Hudson	Nash	Packard	Studebaker	Willys	Misc.	GRAND TOTAL	
Alabama	'38	100	109	494	1006	1709	500	35	3119	40	293	328	4315	2244	43	2287	11	201	67	130	52	75	6	8853	'38
	'37	182	196	1227	2128	3733	575	33	5729	93	585	639	7654	6604	78	6682	2	662	182	290	148	239	4	19596	'37
Arizona	'38	81	85	211	375	752	253	21	864	20	122	102	1382	616	49	665	13	68	67	97	49	33	12	3138	'38
	'37	216	187	495	961	1859	384	23	1743	54	297	292	2793	1326	81	1407	30	189	189	155	132	112	5	6871	'37
Arkansas	'38	118	76	394	799	1387	298	19	2207	19	185	267	2995	1768	40	1808	2	57	58	88	36	23	2	6456	'38
	'37	173	124	754	1624	2675	367	13	3021	54	299	607	4361	3405	68	3473	20	172	106	122	162	96	9	11196	'37
California	'38	2127	2320	4402	8580	17429	5906	609	15106	579	3894	3945	30039	12315	1108	13423	391	1290	952	1957	1996	909	208	68594	'38
	'37	3600	3677	10771	16540	34588	9432	742	25278	1598	9404	9078	55532	24418	1370	25788	726	2449	2176	3647	3547	5837	262	134552	'37
Colorado	'38	216	167	433	965	1781	730	42	2286	46	450	339	3893	1907	101	2008	29	281	203	182	123	55	9	8564	'38
	'37	503	357	1292	2713	4865	1100	57	3978	137	954	879	7105	4352	145	4497	79	769	507	403	356	313	17	18911	'37
Connecticut	'38	315	353	722	2101	3491	1482	146	2265	151	738	810	5592	2028	120	2148	46	239	231	602	264	46	26	12685	'38
	'37	636	769	2471	4039	7915	2022	186	5047	413	1613	2057	11338	5695	160	5855	321	808	745	1691	766	526	23	29988	'37
Delaware	'38	52	42	98	326	518	328	25	786	28	210	212	1589	484	24	508	1	36	20	123	27	7	3	2832	'38
	'37	141	59	258	586	1044	377	37	1248	56	457	438	2613	1195	28	1223	4	136	41	219	89	81	3	5453	'37
Florida	'38	251	158	593	1789	2791	1089	144	2751	158	569	535	5246	3498	298	3796	41	423	227	413	158	224	98	13417	'38
	'37	501	295	1402	3435	5633	1491	136	5357	317	1380	1171	9852	7132	452	7584	127	928	241	869	288	487	125	26134	'37
Georgia	'38	211	166	673	1804	2854	1150	86	3813	105	740	481	6375	3977	147	4124	18	389	252	418	260	95	30	14815	'38
	'37	506	331	2023	4237	7097	1360	85	7356	207	1466	1235	11709	9867	284	10151	48	875	497	950	609	278	21	32235	'37
Idaho	'38	108	56	210	518	892	214	8	1082	8	161	137	1610	861	44	905	21	222	67	27	124	39	1	3908	'38
	'37	188	148	518	1047	1901	307	4	2149	11	383	291	3145	2219	71	2290	52	406	187	96	298	81	3	8459	'37
Illinois	'38	1839	1830	4513	10397	18579	6584	457	17778	654	3806	4628	33907	15298	772	16070	223	1546	1944	2323	1443	505	71	76611	'38
	'37	3981	3441	12101	19935	39458	7906	559	26727	1309	8355	9829	54685	35681	1088	36769	454	3851	4736	4580	3478	1381	304	149696	'37
Indiana	'38	748	682	1474	4451	7355	2070	145	7818	188	1508	1474	13203	6846	234	7080	54	774	396	506	783	246	35	30432	'38
	'37	1555	1411	4720	9992	17678	2784	132	14408	390	4061	4415	26190	18460	335	18795	208	2392	1204	1181	2408	1289	91	71436	'37
Iowa	'38	375	196	900	2801	4272	1229	36	7847	47	711	946	10816	6516	119	6635	59	473	364	261	339	131	18	23368	'38
	'37	669	377	1839	4452	7337	1486	47	9967	124	1443	1947	15014	11286	168	11454	130	1051	687	499	685	350	8	37215	'37
Kansas	'38	289	229	621	1823	2962	772	25	4869	49	571	718	7004	3467	100	3567	22	458	236	171	202	91	4	14717	'38
	'37	539	469	1618	3895	6521	1152	31	7975	92	1344	1655	12249	7504	142	7646	59	1230	521	423	503	194	14	29360	'37
Kentucky	'38	319	132	757	1874	3082	721	36	3754	51	505	575	5642	2552	63	2615	15	283	125	186	144	78	10	12180	'38
	'37	498	315	1901	3543	6257	918	46	5620	151	1019	1190	8944	6717	95	6812	61	482	324	606	399	363	9	24257	'37
Louisiana	'38	210	109	682	1538	2539	602	35	3374	32	407	371	4821	3632	144	3776	5	207	111	161	175	127	14	11936	'38
	'37	328	150	1206	2537	4221	566	29	4630	72	673	505	6475	5696	146	5842	22	340	271	297	274	189	16	17947	'37
Maine	'38	155	121	363	954	1593	601	38	1526	67	400	531	3163	1264	53	1317	18	214	130	158	123	37	1	6754	'38
	'37	266	249	932	1649	3096	729	46	2706	117	830	1068	5496	2818	75	2893	75	486	340	383	306	112	4	13191	'37
Maryland	'38	454	234	795	2281	3764	1290	53	3499	95	568	722	6227	2230	67	2297	23	299	180	468	209	110	8	13585	'38
	'37	695	459	1811	3597	6562	1411	77	6189	207	1201	1519	10604	6159	156	6315	58	597	276	870	448	233	21	25984	'37
Massachusetts	'38	776	558	2333	5651	9318	3295	244	6787	420	2663	2074	15453	6478	312	6790	71	748	784	1290	580	129	59	35222	'38
	'37	1819	1237	6214	9237	18507	3944	389	13733	863	5295	4675	28899	16111	451	16562	347	1822	1899	3044	1520	668	62	73330	'37
Michigan	'38	699	542	1628	3775	6644	3429	264	8572	348	1611	1952	16176	10966	527	11493	140	1046	545	812	316	159	80	37411	'38
	'37	1960	2062	7730	14612	26364	6814	287	23471	951	6368	8385	46276	43432	973	44405	456	4285	1938	3429	952	1458	24	129587	'37
Minnesota	'38	616	449	1234	4240	6539	1632	55	9026	96	972	1256	13037	7417	205	7622	40	573	617	503	579	194	27	29731	'38
	'37	1098	992	2771	6326	11187	1979	69	10788	200	1868	2612	17516	14793	294	15087	158	1140	1098	830	996	547	13	48572	'37
Mississippi	'38	77	63	242	806	1188	441	11	2609	19	188	224	3492	2034	52	2086	1	50	61	47	11	8	2	6946	'38
	'37	137	109	498	1669	2413	462	7	4072	34	320	460	5355	4224	68	4292	1	168	93	131	62	76	3	12594	'37
Missouri	'38	672	718	1673	4547	7610	1913	101	10377	183	1620	1537	15731	6759	290	7049	48	537	610	733	414	346	11	33089	'38
	'37	890	1164	3743	8093	13890	2396	133	15410	334	2725	2785	23783	13678	366	14044	132	984	672	1241	896	448	48	56138	'37
Montana	'38	193	90	328	697	1308	394	13	1443	22	270	151	2293	1207	58	1265	13	188	184	136	127	41	1	5556	'38
	'37	417	183	680	1507	2787	547	11	3157	45	637	485	4882	2761	117	2878	48	524	496	290	297	107	10	12319	'37
Nebraska	'38	245	128	399	1425	2197	636	14	3675	23	413	464	5225	3410	108	3518	18	222	214	172	161	83	3	11813	'38
	'37	315	201	842	2265	3623	838	18	5292	50	745	879	7822	5616	135	5751	22	364	245	285	281	187	5	18585	'37
Nevada	'38	36	24	66	143	269	108	8	275	23	70	49	533	254	31	285	10	26	41	38	30	6	1	1239	'38
	'37	99	73	179	334	685	192	7	560	31	96	136	1022	448	44	492	18	86	116	80	91	33		2623	'37
New Hampshire	'38	70	65	188	497	820	343	23	882	40	230	242	1760	647	31	678	12	123	82	101	87	23	4	3690	'38
	'37	163	96	555	942	1756	434	21	1766	56	574	452	3303	1669	47	1716	48	256	252	271	179	127	4	7912	'37
New Jersey	'38	1106	760	2488	5324	9678	4075	345	7338	379	2023	2910	17070	5544	350	5894	95	677	802	1435	644	256	38	36589	'38
	'37	1967	1755	6517	8595	18834	5039	437	11713	823	4346	5542	27900	13089	431	13520	291	1647	1414	3131	1535	906	53	69231	'37
New Mexico	'38	65	42	157	375	639	212	6	835	9	115	98	1275	633	24	657	1	49	28	61	30	20		2760	'38
	'37	150	70	362	657	1239	288	5	1413	22	222	195	2145	1150	42	1192	11	159	51	103	93	55	2	5050	'37
New York	'38	3584	2254	7439	17303	30580	12471	1039	18910	1299	5990	6453	46162	15303	1071	16374	167	1904	1747	3976	1510	630	208	103258	'38
	'37	6040	4466	17654	25594	53754	14842	1306	32512	2647	13165	12713	77185	38465	1674	40139	666	4166	3466	8394	3839	1698	128	193435	'37
North Carolina	'38	313	149	650	2032	3144	996	45	4487	94	506	628	6756	3654	137	3791	9	351	139	291	98	96	5	14680	'38
	'37	538	245	1462	3943	6188	1126	56	7997	121	1003	1320	11623	8454	176	8630	40	770	259	673	175	337	14	28709	'37
North Dakota	'38	65	49	148	486	748	208	6	1656	9	135	151	2165	1625	29	1654	4	85	97	34	63	40		4890	'38
	'37	91	71	250	666	1078	171	2	1910	23	226	208	2540	2356	38	2394	7	139	112	36	83	53	2	6444	'37
Ohio	'38	1648	1335	3172	7851	14006	4241	310	12389	381	2680	3303	23304	10657	409	11066	229	1389	870	1354	1007	386	48	53659	'38
	'37	3922	3806	10600	20306	38634	6652	423	28291	947	7212	10010	53535	39476	827	40303	818	4715	3001	3709	3034	3670	49	151468	'37
Oklahoma	'38	249	199	666	1835	2949	1004	67	5092	76	763	778	7780	4773	185	4958	7	308	168	226	189	130	9	16724	'38
	'37	391	335	1445	2945	5116	1133	46	6908	150	1349	1601	11187	7274	233	7507	53	531	248	444	390	256	23	25755	'37
Oregon	'38	295	234	568	989	2086	677	42	2265	46	381	517	3928	1584	120	1704	100	290	327	211	222	106	31	9005	'38
	'37	487	494	1295	2542	4818	1066	41	4520	117	1000	1195	7939	4643	209	4852	228	644	745	394	538	523	13	20694	'37
Pennsylvania	'38	2770	1769	4493	11508	20540	6599	416	15342	532	3950	3832	30671	10772	533	11305	194	1524	1369	2315	1831	512	65	70326	'38
	'37	5948	4465	13746	25042	49201	8507	538	28685	1251	9008	9179	57168	34181	1021	35202	816	4677	4257	5789	4653	1890	164	163817	'37
Rhode Island	'38	164	75	264	830	1333	512	45	991	57	334	272	2211	982	54	1036	4	90	100	205	121	16	9	5125	'38
	'37	403	330	911	2104	3748	602	58	2240	114	814	772	4600	2484	108	2592	67	318	317	584	294	91	13	12624	'37
South Carolina	'38	122	80	356	964	1522	413	10	2155	29	182	286	3075	2017	65	2082	9	260	52	175	56	26	7	7267	'38
	'37	217	147	822	1931	3117	518	13	4086	48	434	595	5694	4787	77	4864	1	597	83	462	174	254	3	15249	'37
South Dakota	'38	74	46	219	554	893	232	4	1400	9	132	152	1929	1196	14	1210	6	76	118	40	68	23	1	4364	'38
	'37	163	84	405	929	1581	335	2	2188	17	293	340	3175	2285	52	2337	11	146	176	105	128	56		7715	'37
Tennessee	'38	304	186	728	1783	3001	846	46	3989	73	530	523	6007	3090	90	3180	15	228	192	270	163	54	29	13139	'38
	'37	424	361	2019	3926	6730	823	48	6064	157	1092	916	9100	6915	119	7034	51	563	515	628	444	349	11	25425	'37
Texas	'38	1143	556	2464	6723	10886	3579	288	13884	329	2481	1836	22397	14874	568	15442	51	1003	511	1014	929	282	46	5256	'38
	'37	1535	790	5045	10180	17550	3403	192	18693	421	3937	3310	29956	22256	625	22881	119	1975	781	1915	1674	715	43	77609	'37
Utah	'38	93	113	223	435	864	241	11	965	23	161	157	1558	888	43	931	29	124	69	82	143	24	5	3829	'38
	'37	164	204	647	1093	2108	359	9	1946	23	387	402	3126	1940	76	2016	107	347	171	217	351	107	21	8571	'37
Vermont	'38	53	67	152	403	675	278	2	563	22	162	129	1156	476	15	491		89	52	97	48	25	1	2634	'38
	'37	108	86	347	644	1185	287	10	1038	58	260	285	1938	1061	17	1078	17	192	126	167	55	80	1	4839	'37
Virginia	'38	361	243	880	2479	3963	1125	45	4594	75	520	655	7014	4244	146	4390	34	264	154	348	146	128	25	16466	'38
	'37	471	456	1694	3819	6440	1151	48	7714	106	995	1258	11272	8360	174	8534	56	569	214	737	260	176	18	28276	'37
Washington	'38	352	287	662	1502	2803	888	50	2521	69	685	628	4841	1863	129	1992	62	429	202	262	320	90	42	11043	'38
	'37	653	583	1756	3966	6958	1551	49	6037	182	1937	1600	11356	6101	195	6296	190	1196	633	632	937	747	29	28974	'37
West Virginia	'38	273	203	509	1398	2383	616	24	2532	47	333	320	3862	1619	62	1681	34	224	98	227	190	79	13	8791	'38
	'37	607	472	1349	3149	5577	872	41	5218	103	995	845	8074	4777	111	4888	127	519	295	609	436	348	3	20876	'37
*Wisconsin	'38	512	401	1304	3841	6058	1905	100	6972	101	1368	1380	11826	6061	172	6233	58	586	1432	503	474	147	16	27333	'38
	'37	1047	834	3868	6261	12010	2295	95	11285	206	3071	3312	20264	14113	292	14405	199	1320	4644	1071	1207	468	19	55607	'37
Wyoming	'38	104	54	154	348	660	188	4	763	9	109	81	1154	641	33	674	8	77	58	61	47	24	1	2764	'38
	'37	115	69	366	692	1242	267	3	1209	15	236	223	1953	1272	45	1317	37	210	94	80	113	79	3	5128	'37
Dist. of Col.	'38	315	171	670	1676	2832	1040	87	1722	92	387	557	3885	1659	90	1749	8	147	120	283	215	38	22	9299	'38
	'37	486	377	1456	2669	4988	1098	90	2846	154	970	973	6131	3699	170	3869	54	337	57	780	339	153	11	16719	'37
6 Months Total	'38	25317	18975	54792	136802	235886	80356	5685	239715	7271	47802	50716	431545	204830	9479	214309	2469	21147	17473	25573	17326	6952	1365	974045	'38
	'37	48002	39631	144567	263548	495748	104358	6737	411890	15671	107344	116478	762478	492404	14149	506553	7672	53189	41698	57542	40922	28823	1731	1996356	'37

*Wisconsin estimated for 1938

THE WILLYS DEAL TOPS THEM ALL!

A ◇

THE CAR—SMART!

Willys is way ahead in design—the smartest-looking car on the road. Quality-built with many important features of $1000 cars.

K ◇

THE PRICE—LOW!

The lowest price—*by far*—of all full-size cars in America. Easy to sell—fast turnover.

Q ◇

THE ECONOMY—BIG!

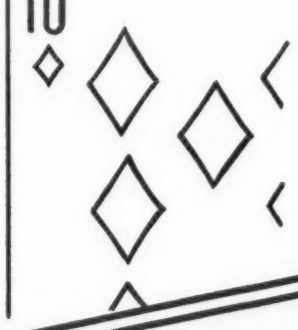
Owners acclaim the car's economy —not alone in miles-per-gallon on gas, but in every phase of car ownership. A recent survey showed Willys owners averaged over $10.00 saved per month on operation cost.

J ◇

THE MARKET—WIDE!

Willys low price adds a new class of buyers who formerly bought only used cars. There are TWICE as many of these as buyers of low-priced new cars. So Willys dealers have THREE times as many prospects as other dealers handling low-priced cars.

10 ◇



THE DEALER—MAKES MONEY!

Willys is fair and liberal. Believes YOU are the Kingpin in your town. Believes "the dealer is right." You can sell Willys in volume and make a big profit. Wire for ALL the facts. Willys-Overland Motors, Inc. . . Toledo, Ohio.

SELL SCORES OF EXTRA-QUALITY FEATURES!

Solid steel top and body • Powerful Fuel-Saver engine • Extra-Wide Road Vision • Heavy Gauge Steel K-X Frame • Front Seat Wider Than "other three" • Oversized Brakes • Big, Airplane-type hydraulic shock eliminators.

HALF THE GAS TWICE THE STYLE

Who's Who Today in the Automotive Industry

A

ACCESSORY FORGINGS CO., 1810 E. Milwaukee ave., Detroit, Mich. Drop forgings, parachute hardware. Thomas J. Reed, gen. mgr. and pur. agt.

ACCURATE PARTS MFG. CO., 12435 Euclid ave., Cleveland, O. Automotive, clutches, clutch plates, pressure plates, clutch parts. Ira Saks, pres.; Morris Saks, vice-pres.; Philip Saks, secy-treas.; Ira Saks, sales mgr.; F. A. Knapp, adv. mgr.; George Jarrett, engr.; E. Fleisher, pur. agt. Det. Rep.—Morris Saks, 477 Selden ave.

ACHESON COLLOIDS CORP., 1635 Washington ave., Port Huron, Mich. "Dag" brand colloidal graphite. M. M. Acheson, chmn.; H. A. Acheson, pres.; G. R. Siegrist, J. P. Deringer, vice-pres.; F. L. Stark, secy.; G. R. Siegrist, gen. mgr.; M. W. Reynolds, sales mgr.; E. A. Bodine, adv. mgr.; R. Szymanowitz, tech. dir.; L. H. Miller, pur. agt. Det. Rep.—W. A. Trebein, 1746 Forest ave., W. Adv. Agcy.—Hyatt Eby, Book bldg., Detroit.

ACKERMAN-BLAESSER-FEZZEY, INC., 1306 Holden ave., Detroit, Mich. Window regulators, concealed door hinges. E. L. Ackerman, pres.; C. T. Fezzey, A. J. Zwierzina, vice-pres.; C. E. Blaesser, secy.; C. E. Blaesser, treas.; Al. Crump, sales engr.; C. T. Fezzey, sales mgr., adv. mgr.; C. E. Bleaesser, pur. agt. Det. Rep.—E. W. Parrish, General Motors bldg.

ACME AIR APPLIANCE CO., Inc., 254 Park ave., Brooklyn, N. Y. Tire valves, cores, caps, air chucks, hose couplers, radiator faucets, service gauges, fuses, electric vulcanizer. Louis Wein, pres.; Harry Perlman, vice-pres., sales mgr.; Alfred E. Bott, adv. mgr.; W. H. Longstreet, engr.; Morris Perlman, pur. agt. Det. Rep.—Mark L. Berman, 2722 Webb ave. Adv. Agcy.—Alfred Bott Co., 205 E. 42nd st., New York City.

ACME SIX WHEELER CO., Cadillac, Mich. Six wheel units (third axles), wheelbase extension units. R. J. Teetor, gen. mgr.; E. T. Price, sales mgr., adv. mgr.

AC SPARK PLUG DIVISION, General Motors Corp., 930 Harriet st., Flint, Mich. Air cleaners, ammeters, carburetor intake silencers, combination intake silencers and air cleaners, die castings, die casting machines, flame arresters, flexible shafts and cables, fuel pumps, gasoline gauges and strainers, instrument panels, engine bearings, oil filters, pressure gauges, radiator pressure caps, reflex signals, Remo injectors and fluid, spark plugs, cleaners and testers, gapping tools, speedometers, tachometers, thermo gauges, vacuum pumps. F. S. Kimmerling, pres., gen. mgr.; T. G. McDougal, vice-pres.; Eskild Bondesen, comptr.; W. S. Isherwood, sales mgr.; Earl McGinnis, adv. mgr.; C. W. McKinley, engr.; H. R. Wells, pur. agt.; L. C. Goad, mfg. mgr. Det. Rep.—AC Spark Plug Division, General Motors Corp., 10-136 Gen. Mtrs. bldg. Adv. Agcy.—D. P. Brother & Co., Gen. Mtrs. bldg., Detroit.

(See display advertising index)

ACTUS PRODUCTS CORP., 262 E. Third st., Mt. Vernon, N. Y. Spark plugs, wraplock, piston skirt expanders, water filters, Valpak, ring groove cleaners, hose clamps, valve guide cleaners. Carroll W. Prochaska, pres.; Hugh McCahan, vice-pres.; Alfred P. Walker jr., secy.; Henrietta McCarthy, treas.

ADAMS GREASE GUN CORP., 54 W. 21 st., New York, N. Y. Grease guns, hand and power; oil spray guns, hose, high pressure steel and rubber, fittings, etc. Daniel G. Adams, chmn., pres.,; Milton G. Adams, secy.; Henry P. Adams, treas.; D. G. Adams, gen. mgr.; M. G. Adams, sales mgr., adv. mgr.; G. W. DeLoache, engr.; D. G. Adams, pur. agt.

ADLER MFG. CO., 2210 Commonwealth ave., North Chicago, Ill. Ignition oscillograph, timing light (synchrometer), circuit analyzers. O. Adler, pres.: F. Adler jr., vice-pres.; M. Lahey, secy.-treas.; O. Adler, gen. mgr.

AEROCAR CO. of DETROIT, 4815 Cabot ave., Detroit, Mich. Aerocars and other types of trailers. S. M. Williams jr., chmn., pres.; C. P. Lacy, vice-pres.; Donald MacDonald, secy.-treas., gen. mgr.; C. P. Lacy, sales mgr.; O. G. Blochor, engr.; Donald MacDonald, pur. agt.

AETNA BALL BEARING MFG. CO., 4600 Schubert ave., Chicago, Ill. Clutch release bearings, thrust ball bearings. G. W. Nordstrum, pres.; H. F. Lehmpuhl, vice-pres.; E. K. Zitzewitz, secy.; G. W. Nordstrum, treas., gen. mgr.; E. K. Zietzewitz, engr.; B. E. Vergowe, pur. agt. Det. Rep.—S. T. Keller, 7310 Woodward ave.

AHLBERG BEARING CO., 3025 W. 47 st., Chicago, Ill. Ball bearings (all types), pillow blocks, ground bearings. Chas. J. Bender, pres.; F. O. Burkholder, vice-pres.; P. F. McGuinn, secy.; L. J. Behm, treas.; F. O. Burkholder, sales mgr.; B. S. Okner, engr.; P. F. McGuinn, pur. agt. H. S. Mann, 4708 Cass ave.

AIR DEVICES CORP., 70 Britannia st., Meriden, Conn. Air conditioning units, circulating and heat fans, automotive parts and accessories, screw machine products and stampings. C. W. Colby, vice-pres., gen. mgr.; A. B. Chace, vice-pres. in chge. of pur.; C. A. Cunneen, secy.-treas.; Geo. Lundquist, sales mgr., automotive div.; J. A. Sullivan, sales mgr., telephone div.; W. R. Curtiss, engr. Det. Rep.—C. O. Spillman (automotive div.), 6432 Cass ave. Adv. Agcy. —R. L. Hirschfeld, 478 E. Main st., Meriden, Conn.

AIRFLOAT COACH MFG. CO., 1727-31 North Main st., Los Angeles, Calif. House trailers. Omar Suttles, pres.; Jean Wardell, vice-pres.; Ruth Suttles, secy.; Thos. J. Wardell, treas., sales mgr.; Omar Suttles, engr.; Les Gotschall, pur. agt. Adv. Agcy. — Fred Henson Co., 313 S. Central st., Los Angeles, Calif.

AIR-MAZE CORP., 812 Huron rd., Cleveland, O. Air filters, oil bath type; air filters, Unimaze type (viscous coated open screen); breather protectors, for crankcase breathers; flame arresters, for carburetor intake. A. E. Schaaf, pres.; G. M. Walton, vice-pres.; Miss L. M. Henton, secy.; H. H. Schaaf, treas.; A. E. Schaaf, gen. mgr.; H. H. Schaaf, sales mgr.; F. M. Paul, adv. mgr.; C. J. Glanzer, engr.; P. C. Hungerford, pur. agt.; C. Kozell, engr. Adv. Agcy.— Sweeney & James, Bulkley blvd., Cleveland, O.

AIR REDUCTION SALES CO., 60 E. 42nd st., New York, N. Y. Oxygen, acetylene, nitrogen, argon, neon, and other atmospheric gases, acetylene generators, gas welding and cutting apparatus and supplies, gas pressure regulators, gas welding rods, gas cutting machines, portable pipe cutting and beveling machine, portable weld testing machine, Wilson arc welding machines, electrodes and arc welding supplies, hard facing equipment and rods, flame hardening equipment, National Carbide. C. E. Adams, chmn.; C. S. Munson, pres.; C. D. W. Gibson, H. Van Fleet, F. J. Metzger, vice-pres.; R. B. Davidson, secy.; R. W. Ryder, treas.; E. F. Pettigrew, gas sales mgr.; G. Van Alstyne, adv. mgr.; J. E. Fricker, engr.; H. M. Daggett, pur. agt. Det. Rep.—W. M. Hayes, Air Reduction Sales Co., 7991 Hartwick st.

ALBERTSON & CO., Inc., 3100 Lowell ave., Sioux City, Ia. Sioux valve seat reamers, flexible shafts, electric sanders, valve seat grinders, valve seat rings, electric polishers, electric drills, valve seat ring tools, metal spray guns, bench grinders, valve face grinding machines, hole saws. O. Albertson, chmn., pres., treas.; H. A. Jacobsen, vice-pres., secy; H. A. Jacobsen, sales mgr., adv. mgr.; G. Olsen, engr.; C. Rasmussen, pur. agt. Det. Rep.—John W. Leslie, 14391 Coyle ave. Adv. Agcy.—Mitchell Adv. Agency, 301 Essex bldg., Minneapolis, Minn.

ALBION MALLEABLE IRON CO. Albion and Chestnut sts., Albion, Mich. Malleable iron castings. B. D. Brown, pres., treas.; R. H. Gardner, vice-pres.; M. B. Murray, sec.; C. L. Carter, gen. mgr, sales mgr.; D. L. Boyd, engr.; P. J. Esling, pur. agt. Det Rep.—Ben R. Mayne, 501 Curtis bldg.

This is Campbe

EXPERIENCE . . . Campbell-Ewald is one of America's oldest advertising agencies.

SIZE . . . From the very beginning, in 1911, Campbell-Ewald has always enjoyed a high ranking among advertising agencies in number of important accounts served, as well as in variety of products advertised.

VERSATILITY . . . Nearly every kind of product and service is included among those offered by Campbell-Ewald clients . . . automobiles, trucks, tires, footwear, batteries, electrical systems, automotive accessories, adding machines, calculators, bookkeeping machines, cash registers, typewriters, posture chairs, railroads, steamship lines, resorts, hotels, toys, trade associations, luggage, golf balls, shovels, rubber sundries, building material, household products, food products, financial, cosmetics, newspapers, neckwear, and many others.

TYPE OF ACCOUNTS SERVED . . . Many leaders in American business and industry, such as the manufacturer of America's largest selling motor cars and trucks; America's leading business machine equipment manufacturer; manufacturer of the first nationally advertised rubber footwear; the world's largest producer of rubber; the world's largest manufacturer of automotive electrical equipment. It is a fact no less notable that every product advertised by Campbell-Ewald commands the highest respect in its particular field.

COLLATERAL ACTIVITIES . . . It is a cardinal principle with Campbell-Ewald to aid in promoting civic ideals, as well as to assist in raising the standards of advertising through active participation in the work of associations which have this goal as their objective.

Campbell-Ewald welcomes discussion of its services and facilities with any concern which offers a sound product that has potentialities for growth.

"ADVERTISING WELL DIRECTED"

A Complete Roster of the Manufacturers of Passenger Cars, Trucks, Parts and Accessories, Products Made, Officers, Detroit Representatives and Advertising Agents

ALLEGHENY STEEL CO., Brackenridge, Pa. Allegheny metal, hot and cold rolled steel sheets, stainless steels, electrical sheets, hot and cold rolled strip, steel castings, seamless tubing, boiler tubes, pipe. W. F. Detwiler, pres.; J. O. Carr, L. W. Hicks, vice-pres.; E. J. Hanley, secy.; F. H. Stephens, treas.; W. A. Givens, gen. mgr.; R. M. Allen, ass't. sales mgr.; Clark W. Green, adv. mgr.; Jack Taylor, engr.; Earl McGraw, pur. agt. **Det. Rep.**—H. N. Aubuthnot, General Motors bldg. **Adv. Agcy.**—Walker & Downing, Oliver bldg., Pittsburgh, Pa.

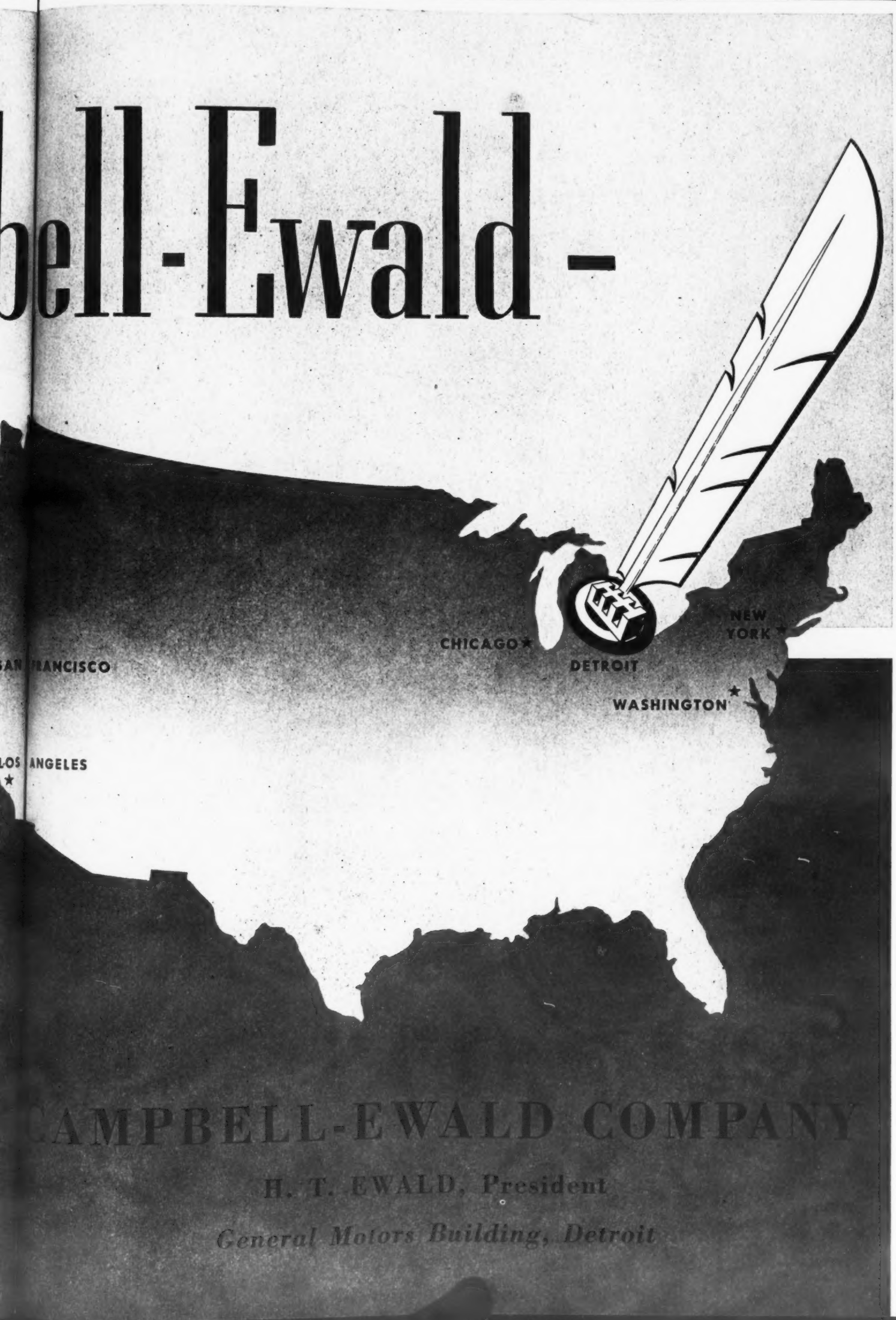
ALLEN ELECTRIC & EQUIPMENT CO., 2101-17 N. Pitcher st., Kalamazoo, Mich. Tune-up and electrical equipment, battery chargers and testers, arc welders and spot welders. G. H. Allen, pres., gen. mgr.; L. F. Woolman, vice-pres.; M. E. McMartin, secy.; W. L. Borroughs, treas.; B. E. Bertholet, school dir.; L. F. Woolman, sales mgr., adv. mgr.; Lee Parmeter, engr.; Harold Roe, pur. agt. **Det. Rep.**—Kent Fullerton, 15396 Tracey ave. **Adv. Agcy.** — Wm. J. Williams, Pythian bldg., Kalamazoo, Mich.

ALLIED PRODUCTS CORP., Richard Brothers Division, 1560 E. Milwaukee ave., Detroit, Mich. Commercial dies for sheet metal stamping and forming, punches and dies for sheet metal piercing, die sections, die sets and die accessories. C. C. Richard, chmn., pres., gen. mgr.; A. W. Knebusch, vice-pres.; W. E. Ray, secy.-treas.; S. D. Vazana, sales mgr., com. die dept.; Walter Smith, sales mgr. Richard Bros Interchangeable Punch and Die dept.; N. A. Kenerson, engr.; Florence Richards, pur. agt.

ALLIED PRODUCTS CORP., Victor Peninsular Division, 4646 Lawton ave., Detroit, Mich. Cap screws and cold forged parts. C. C. Richard, chmn., pres.; A. W. Knebusch, vice-pres.; W. E. Ray, secy.,treas.; C. C. Kamphausen, gen. mgr., engr.; George A. Sved, sales mgr.; Katherine Morier, pur. agt.

ALL-STEEL-EQUIP CO., Inc., Aurora, Ill. Steel lockers, filing cabinets, storage and wardrobe cabinets, tool boxes, bench drawers, tool stands, shop boxes, tapered pans and other types of shop and office equipment. John Knell, pres.; F. R. McQuown, vice-pres.; A. F. Erickson, secy.-treas.; B. G. Wiley, gen. mgr.; F. R. McQuown, sales mgr.; J. M. Rolfe, adv. mgr.; F. A. Saaf, engr.; O. A. Meyers, pur. agt. **Det. Rep.**—H. L. Breitenstein, 2761 Grand River ave. **Adv. Agcy.**—The Buchen Co., Daily News bldg., Chicago.

ALMA TRAILER CO., 903 Michigan ave., Alma, Mich. Alma "Silvermoon' house trailers. Frank H. Joyce, pres., treas., gen. mgr.; Kenneth B. Montigel, secy.; Glen Anderson, engr.; Lester M. Haner, pur. agt. **Det. Rep.** — Osborn Trailer Sales, 11711 Grand River. **Adv. Agcy.**—Chas. A. Mason, David Stott bldg., Detroit, Mich.



ALMETAL UNIVERSAL JOINT CO., 1555 E. 55 st., Cleveland, O. Roller bearing universal joints for passenger cars and trucks, plain bearing universal joints for passenger cars, factory duplicate universal joints for torque tube drive cars, universal joints for power takeoff and auxiliary drives, universal joint ball housings, service parts for universal joints. D. O. Freeman jr., chmn.; A. F. Misch, pres.; gen. mgr.; E. P. Rollings, vice-pres. and treas.; A. W. Gray, sales mgr.; W. H. Reeves, sales mgr.; G. J. Misch, sales mgr.; C. K. Morton, engr. **Det. Rep.**—Universal Joint Service, Inc., 3700 Cass ave.

ALUMINUM AIRCELL INSULATION CO. 415 Curtis bldg., Detroit, Mich. Reflect-O-cell insulation for trucks, buses, trailers; asbestos for ovens, furnaces and steam pipes. Lambert M. Payne, pres.; C. H. Allin, secy., treas.; L. D. Rinker, sales mgr.; Harry Karcher, engr. **Adv. Agcy.**—Rolfe C. Spinning, Inc., 1238 Maccabees bldg., Detroit, Mich.

ALUMINUM CO. OF AMERICA, Gulf bldg., Pittsburgh, Pa. Lynite aluminum alloy pistons, Alcoa aluminum alloy cylinder heads, aluminum in every commercial form. A. V. Davis, chmn.; R. A. Hunt, pres.; G. R. Gibbons, vice-pres. in chge. of sales; G. J. Stanley, vice-pres. and gen. sales mgr.; G. R. Gibbons, secy.; R. E. Withers, treas.; C. C. Carr, adv. mgr.; R. O. Keefer, pur. agt.; H. L. Smith jr., in chge. of automotive sales. **Det. Rep.** — Aluminum Co. of America, 3311 Dunn rd. **Adv. Agcy.**—Fuller & Smith & Ross, Inc., 1501 Euclid ave., Cleveland, O.

ALUMINUM INDUSTRIES, Inc., 2416-38 Beekman st., Cincinnati, O. Automotive engine parts, permanent and semi-permanent aluminum alloy castings, aluminum paint. John Eckerle, pres.; J. P. Andrae, vice-pres.; R. T. Mesker, secy, H. J. Hater, treas., gen. mgr.; B. V. Keller, adv. mgr.; M. A. Beckmann, engr.; E. F. Eckerle, pur. agt. **Det. Rep.**—B. J. Plumley, 902 New Center bldg.

AMERICAN AUTO-FELT CORP., 617 Crosby st., N. W., Grand Rapids, Mich. Cotton batts, pads and padding. W. W. Hoagland, pres.; A. A. Ginsburg, vice-pres.; J. Ginsburg, secy.-treas.; G. Sarett, gen. mgr.

AMERICAN BANTAM CAR CO., Pillow st., Butler, Pa. Bantam "60" cars and trucks. Martin Tow, chmn.; Roy S. Evans, pres.; Francis H. Fenn, R. O. Gill, vice-pres.; W. W. Anspach, secy.; Martin Tow, treas.; A. C. Olander, sales mgr.; Whiting Hall, adv. mgr.; W. E. England, engr.; G. S. Martin, pur. agt.; **Adv. Agcy.**—Ketchum, McLeod & Grove, Koppers bldg., Pittsburgh, Pa.

AMERICAN BODY & TRAILER CO., 1500 Exchange ave., P. O. Box "A" N. W. Station, Oklahoma City, Okla. Beverage bodies, school buses, trailers. R. R. King, pres., gen. mgr.; H. V. Bowlby, pur. agt.; Frank King, parts sales dept.; L. H. King, shop supt.; W. C. Phillips, asst. shop supt.

AMERICAN BRAKEBLOK, Division of The American Brake Shoe and Fdy. Co. 4600 Merritt ave., Detroit, Mich. Brake lining for automotive and industrial use. W. B. Given jr., pres.; W. A. Blume, H. A. Gillies, vice-pres.; H. Seith, asst. vice-pres.; J. H. Parsons, secy.; F. H. Janke, treas.; C. Q. Smith, sales mgr.; P. B. Hoffman, adv. mgr.; H. N. Smith, chief engr.; C. H. McGrath, gen. pur. agt. **Det. Rep.**—W. C. Munson, 4600 Merritt ave. **Adv. Agcy.**—Sidener & Van Riper, Inc., Circle Tower, Indianapolis, Ind.

AMERICAN BRASS CO., THE 414 Meadow st., Waterbury, Conn. Copper, brass, nickel silver, phosphor bronze, beryllium copper, copper-silicon alloys, sheets, wire, rods, tubes, pipe, extruded and drawn shapes, bars, plates, eyelets, gommets, die-pressed forgings, flexible metal hose and tubing. John A. Coe, pres.; C. F. Hollister, Clark S. Judd, vice-pres. **Det. Rep.**—A. H. Quigley, 174 S. Clark ave. **Adv. Agcy.**—Lord & Thomas, 247 Park ave., New York, N. Y.

AMERICAN BRASS CO., THE American Metal Hose Branch, 67 Jewelry st., Waterbury, Conn. Flexible metal hose and tubing, flexible metal conduit. C. S. Hungerford, vice-pres.; W. B. Pickard, mgr.; C. E. Woodward, adv. mgr.; J. L. Vaill, engr.; W. S. Edwards, pur. agt.; L. H. Davidson, supt. **Adv. Agcy.**—Lord & Thomas, New York, N. Y.

AMERICAN CABLE DIVISION, Automotive Dept., Amn. Chain & Cable Co., Inc., 12-251 General Motors bldg., Detroit, Mich. Tru-Stop disc brake for automotive vehicles, Tru-Lay brake cable assemblies, push-pull control, cable, oil controller. W. B. Lashar, chmn.; W. T. Morris, pres.; W. F. Wheeler, A. P. Van Schaick, C. G. Williams, G. C. Moon, vice-pres.; W. M. Wheeler, secy.; J. O. Lashar, adv. mgr.; Harry Williams, sales mgr. **Adv. Agcy.**—Reincke-Ellis-Younggreen & Finn, 520 N. Michigan ave., Chicago, Ill.

AMERICAN CHAIN DIVISION, American Chain & Cable Co., Inc., Bridgeport, Conn. Weed American Bar-reinforced and Weed tire chains for passenger cars, trucks, buses and tractors, farm tractor chains, cotter pins, towing and sling chains, tire chain tools, tire chain repair parts. W. B. Lashar, chmn.; W. T. Morris, pres.; W. F. Wheeler, A. P. Van Schaick, C. G. Williams, G. C. Moon, vice-pres.; W. M. Wheeler, secy.; W. D. Kirkpatrick, sales mgr.; J. O. Lashar, adv. mgr. **Adv. Agcy.** — Reincke-Ellis-Younggreen & Finn, 520 N. Michigan ave., Chicago, Ill.

(Continued on Next Page)

Who's Who

(Continued from Page 17)

AMERICAN ELECTRIC FURNACE CO., 27 Von Hillern st., Boston, Mass. Electric heat treating furnaces, gas heat treating furnaces. K. A. Juthe, pres.; Stanley N. Juthe, vice-pres., pur. agt.; Irenne Loughney, secy.; K. A. Juthe, treas.; John C. Juthe, sales mgr.; Russell W. Hoch, engr. **Det. Rep.**—Carman Adams, Inc., 2970 W. Grand blvd.

AMERICAN GREASE STICK CO., Muskegon, Mich. Door-ease stainless stick lubricant, Door-ease dripless penetrating oil. Harold Rosen, gen. mgr.; Leo S. Rosen, sales mgr.; F. M. Harrington jr., asst. sales mgr. **Adv. Agcy.**—National Advertisers, Inc., Grand Rapids Trust bldg., Grand Rapids, Mich.

AMERICAN HAMMERED PISTON RING DIVISION, Koppers Co., Bush and Hamburg sts., Baltimore, Md. Piston rings, Koetherizing, valve stem packing, piston skirt expanders. A. W. Morton, vice-pres. in chge.; T. L. Ford, sales and adv. mgr.; J. E. Aldridge, pur. agt. **Det. Rep.**—J. O. Holls, 7310 Woodward ave. **Adv. Agcy.**—Aitkin-Kynett Co., 1400 S. Penn Sq., Philadelphia, Pa.

AMERICAN POLISH CO., 224 N. Desplaines st., Chicago, Ill. Colored automobile wax, automobile cleaner. Otto F. Scholz, pres.; Emelia Kleine, vice-pres.; Otto F. Scholz jr., secy.; Henry E. Scholz, asst. treas.; Ralph E. Nigg, sales mgr.; Philip R. King, chemist. **Det. Rep.**—Wayne Lacquer & Auto Supply Co., 4418 Woodward ave. **Adv. Agcy.**—World Wide Adv. Corp., 11 W. 42nd st., New York, N. Y.

AMERICAN RAILWAY SIGNAL CO., THE S. County Line st., Fostoria, O. Automotive fusee type flares. C. B. Brown, pres.; Earl Ash, vice-pres.; L. E. Kinn, secy.; Geo. M. Fink, treas.; C. B. Brown, gen. mgr.; B. F. Brown, sales mgr.; C. B. Brown, pur. agt.

AMERICAN ROLLING MILL CO., Middletown, O. Iron and steel sheets, coils, strip, plates, bars, in hot-rolled or hot-rolled pickled finishes, cold-rolled, in sheets and strip, enameling iron, in sheets, stainless steel sheets, strip and light plates, electrical steel sheets, galvanized sheets and coils, long terne sheets or coils, spiral welded pipe, wrought steel wheels. George M. Verity, chmn.; Charles R. Hook, pres.; Calvin Verity, vice-pres., gen. mgr.; W. W. Sebald, Bennett Chapple, vice-pres.; W. D. Vorhis, secy.; M. A. Browley, treas.; H. M. Richards, sales mgr.; H. V. Mercer, adv. mgr.; E. N. Millan, engr.; Newman Ebersole, pur. agt. **Det. Rep.**—R. L. Shugg, mgr. dist. office, 5-261 Gen. Mtrs. bldg. **Adv. Agcy.**—N. W. Ayer & Son, 500 Washington Sq., Philadelphia, Pa.

AMERICAN SPRING & MFG. CORP., Elm st., Holly, Mich. Coil springs, flat spring, wire forms, wire specialties. E. A. Hartz, pres.; K. K. Martin, vice-pres.; E. A. Hartz, secy.; E. E. Hartz, treas. E. A. Hartz, gen. mgr.

AMERICAN SWISS CO., 1650 Fernwood ave., Toledo, O. Automobile door locks. A. F. Seubert, pres., gen. mgr., sales mgr.; J. C. Fast, vice-pres.; Edw. F. Knight, secy.-treas.; H. W. Rightmyer, engr.; D. J. Dunkle, pur. agt. **Det. Rep.**—Arthur W. Widman, 615 Fisher bldg. **Adv. Agcy.**—Sun Advertising Co., Toledo, O.

AMERICAN WOOLEN CO., Inc., 225 Fourth ave., New York, N. Y. Automotive upholstery fabrics. Moses Pendleton, pres.; F. S. Connett, treas.; Charles H. Silver, sales mgr., adv. mgr. P. E. Wardwell, pur. agt. **Det. Rep.**—E. H. Miller, Room 1002, Fisher bldg.

AMES CO., B. C. Waltham, Mass. Cylinder gauges, crankshaft gauges, dial micrometer, dial scale. Warren Ames, pres.; Ira R. Ames, vice-pres.; Henry G. Haynes, secy.; Ira R. Ames, treas., sales mgr., adv. mgr. **Det. Rep.**—J. M. Graven, 312 Curtis bldg.

AMPLEX MFG. CO., Div. of Chrysler Corp., 6501 Harper ave., Detroit, Mich. Oil-cushioned bronze bearings. A. J. Langhammer, pres.; Lester L. Colbert, vice-pres.; H. E. Sellers, secy.-treas.; A. H. Merschel, sales mgr.; George Platzer, chief engr. **Det. Rep.**—Welker Machy. Co., Inc., 401 New Center bldg.

ANDERSON COACH CO., U. S. 12, Two Miles West of Marshall, Mich. Trailers, fire apparatus, Rex R. Anderson, pres.; Giles G. Bole, vice-pres., secy.; James W. May, treas. **Adv. Agcy.**—Carl Helpenstell, 2970 W. Grand Blvd., Detroit.

ANDERSON CO., THE 957 Garfield st., Gary, Ind. "Vision Control" products and timers. Jno. W. Anderson, chmn., pres., gen. mgr., sales mgr.; N. O. Webber, vice-pres.; P. H. Stevens, secy.-treas.; Edward Larson, adv. mgr.; Arthur Wille, engr.; Kenneth Wittenberg, pur. agt. **Det Rep.**—H. E. Purvis, 1638 Hollyrood rd., Cleveland, O. **Adv. Agcy.**—Schwab & Beatty, 386 4th ave., New York City.

ANDREWS MFG. CO., 3205-07 Locust blvd., St. Louis, Mo. Battery and ignition cables, wiring assemblies, automotive spooled wire. Geo. W. Andrews, owner; L. J. Westbrook, foreman; M. J. Wexler, pur. agt. **Adv. Agcy.**—Beecher Adv. Co., St. Louis, Mo.

ANTHONY CO., Inc., Streator, Ill. Hydraulic hoists and dump bodies, express and stake bodies, semi-trailer dump units, steel commercial bodies. W. C. Anthony, pres.; R. R. Howard, vice-pres.; Paul Heflen, secy.; C. H. Worrells, treas.; F. E. Evans; R. R. Howard, sales mgr.; J. G. Reinhard, adv. mgr.; L. Wachter, engr.; L. E. Walker, pur. agt. **Adv. Agcy.**—Kane Adv. Agency, 111 E. Monroe st., Bloomington, Ill.

APCO MOSSBERG CO., Lamb st., Attleboro, Mass. Wrenches, tools, spools, reels, beams. L. B. Smith, pres., gen. mgr.; J. G. McGreevy, W. A. Blackburn, vice-pres.; C. D. Smith, asst. treas., adv.

(Continued on Next Page)

Figures in this table by R. L. Polk & Co., New Jersey Motor List Co. and Sherlock & Arnold

New Passenger Car Registrations By Makes

STATES		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP							HUDSON GR'P		
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	*Buick	Cadillac	Chevrolet	LaSalle	**Olds-mobile	†Pontiac	Totals	§Terraplane	Hudson	Totals
Alabama	'37	382	406	2189	3936	6913	10217	141	10358	1174	59	11195	149	1097	1222	14896	1063	99	1162
	'36	242	172	2032	3778	6224	9032	122	9154	972	47	14652	111	839	1001	17622	1025	116	1141
	'35	196	107	1364	3517	5184	9358	12	9370	662	30	10611	58	968	966	13295	585	150	735
	'34	244	53	684	3569	4550	7517	1	7518	412	26	10680	42	608	482	12250	447	90	537
	'33	193	50	430	2112	2785	3446	6	3452	239	7	6474	11	146	506	7383	233	14	247
	'32	179	83	136	653	1051	2365	7	2372	279	20	3514	4	58	239	4117	89	21	110
	'31	378	154	302	834	1668	5183	6	5189	581	27	6187	22	99	337	7253	94	44	138
	'30	519	261	541	717	2038	11438	26	11464	1040	46	8072	84	185	317	9744	350	178	528
	'29	973	316	1270	1219	3778	25191	38	25229	1901	100	14639	106	314	1149	18209	1241	492	1733
Arizona	'37	457	335	940	1877	3609	2094	145	2239	758	33	3239	97	570	562	5259	283	80	363
	'36	223	276	1189	1894	3582	2489	70	2559	567	32	3602	33	510	408	5152	316	117	433
	'35	104	146	863	1341	2454	2332	4	2336	326	15	2471	36	462	555	3865	236	104	340
	'34	55	71	326	1122	1574	1633	4	1637	238	10	1906	15	208	215	2592	171	99	270
	'33	29	54	176	466	725	850		850	156	5	1256		120	200	1737	102	6	108
	'32	25	73	86	187	371	732	5	737	161	9	753	3	59	78	1063	59	21	80
	'31	87	110	153	236	586	1804	5	1809	347	17	1720	7	126	110	2327	49	45	94
	'30	118	180	253	168	719	3537	9	3546	523	16	2131	22	186	230	3108	108	77	185
	'29	314	454	612	354	1734	5590	7	5597	752	44	4046	45	498	823	6208	553	240	793
Arkansas	'37	359	209	1296	2849	4713	5709	131	5840	701	20	5705	86	608	967	8087	229	48	277
	'36	239	82	1173	2589	4083	5366	67	5433	472	27	7200	43	479	974	9195	350	55	405
	'35	175	80	1040	2407	3702	5974	7	5981	296	6	5848	41	561	852	7604	168	56	224
	'34	142	44	639	2316	3141	5172	1	5173	178	11	6059	17	310	315	6890	143	40	183
	'33	109	53	531	1314	2007	3113	1	3114	112	2	5719	5	109	229	6176	77	4	81
	'32	86	48	203	430	767	2450	6	2456	151	8	3169	6	29	152	3515	29	5	34
	'31	213	71	396	515	1195	3436	4	3440	217	30	3920	24	68	230	4489	41	15	56
	'30	451	197	595	583	1826	9336	18	9354	454	47	5933	66	99	319	6918	185	63	248
	'29	674	473	1272	1000	3419	16776	30	16806	924	57	8528	111	191	1018	10829	616	159	775
California	'37	7230	7245	20443	31134	66052	38324	2574	40898	18316	1289	49120	3164	17115	17268	106272	3083	1170	4253
	'36	5839	6067	23287	34234	69427	49922	1684	51606	14134	1357	56118	1676	16309	15039	104633	3178	1612	4790
	'35	3043	3603	16725	28045	51416	52851	240	53091	6368	865	39501	1402	12334	8363	68833	2458	1783	4241
	'34	1624	1065	6275	18938	27902	34270	173	34443	4105	513	25897	522	4848	2712	38597	1542	1433	2975
	'33	1981	2389	5983	18164	28517	20548	207	20755	3035	373	26594	337	1687	3124	35150	1651	222	1873
	'32	1972	2387	2307	6949	13615	19643	358	20001	3494	574	14587	370	1181	2021	22227	1453	608	2061
	'31	3443	3036	3963	5807	16249	42643	363	43006	7777	1156	34211	537	1990	4075	49746	1487	1277	2764
	'30	4599	3852	4997	2296	15744	78235	435	78670	9600	1472	34989	1109	2466	5007	54643	3224	2187	5411
	'29	7307	5858	8710	3357	25232	83291	668	83959	14541	1642	39128	1953	5789	10516	73569	11208	5592	16800
Colorado	'37	927	678	2274	4458	8337	6799	286	7085	1978	82	7429	234	1798	1535	13056	1056	222	1278
	'36	722	390	2413	5414	8939	7603	164	7767	1800	74	10193	89	1710	1526	15392	1180	276	1456
	'35	369	177	1729	3427	5702	7656	16	7672	861	42	6415	80	1402	1592	10392	603	243	846
	'34	338	123	776	2878	4115	5292	13	5305	592	38	5556	60	711	706	7663	378	252	630
	'33	217	118	668	2344	3347	2004	17	2021	391	23	3975	27	192	649	5257	266	16	282
	'32	255	98	301	1139	1793	2535	16	2551	586	34	3059	22	116	419	4236	278	83	361
	'31	390	106	576	783	1855	4930	15	4945	1086	55	5993	39	280	756	8209	356	256	612
	'30	503	257	749	640	2149	10182	21	10203	1397	54	7055	88	349	808	9751	557	300	857
	'29	684	595	1356	1032	3667	14482	26	14508	1906	58	6937	129	659	1706	11395	1906	624	2530
Connecticut	'37	1222	1500	4361	7108	14191	8300	324	8624	4019	304	8933	730	2799	3689	20474	1027	248	1275
	'36	835	853	3911	8756	14355	8989	207	9196	3378	330	10815	286	2951	3471	21231	1014	409	1423
	'35	562	604	2821	6081	10068	10307	43	10350	1835	186	7548	260	2325	2485	14639	845	413	1258
	'34	447	194	1328	4684	6653	6717	34	6751	1364	172	5909	93	1213	1562	10313	806	402	1208
	'33	547	484	1616	4522	7169	3723	53	3776	1083	86	6217	104	674	2040	10204	862	64	926
	'32	451	501	460	2330	3742	2918	44	2962	1202	150	4405	108	394	1142	7401	618	136	754
	'31	1015	871	1149	1429	4464	7019	56	7075	2226	359	8175	200	802	2207	13969	940	466	1406
	'30	1351	1098	1513	808	4770	12931	74	13005	2749	402	7491	406	772	2052	13872	1658	757	2415
	'29	1832	1572	2441	1160	7005	12540	128	12668	3276	538	8430	656	1330	3723	17953	3577	1142	4719
Delaware	'37	253	125	503	1062	1943	1900	60	1960	746	65	2420	112	795	762	4900	139	56	195
	'36	118	70	245	1080	1513	1539	32	1571	630	68	2555	57	693	640	4643	173	45	218
	'35	79	50	207	841	1177	1969	2	1971	323	38	1878	43	599	500	3381	159	69	228
	'34	68	15	109	626	818	1141	3	1144	255	26	1511	24	341	326	2483	146	60	206
	'33	81	40	48	474	643	803	5	808	180	14	1550	11	190	355	2300	136	2	138
	'32	93	42	24	242	401	767	12	779	222	28	1066	16	79	200	1611	61	13	74
	'31	207	32	35	174	448	1577	12	1589	373	45	1591	36	137	320	2502	97	45	142
	'30	216	49	45	152	462	3091	13	3104	495	72	1673	64	87	340	2731	167	80	247
	'29	97	18	86	165	366	3201	11	3212	511	74	1736	114	156	622	3213	424	118	542
Florida	'37	867	571	2411	5781	9630	10415	715	11130	2600	190	9611	558	2271	2040	17270	1258	246	1504
	'36	574	314	2148	5919	8955	9978	387	10365	1720	189	10152	254	1750	1579	15644	1228	293	1521
	'35	404	216	1649	4317	6586	10360	44	10404	1043	89	8242	194	1414	1523	12505	673	258	931
	'34	359	121	1136	4092	5708	7745	28	7773	883	57	7848	77	587	985	10437	597	230	827
	'33	245	91	725	2593	3654	4449	15	4464	392	23	5834	32	170	785	7236	390	39	429
	'32	289	116	209	1390	2004	3932	27	3959	464	44	4419	29	103	508	5567	332	120	452
	'31	659	134	382	1281	2456	8397	33	8430	939	71	8800	41	256	1010	11117	511	323	834
	'30	699	240	451	571	1961	14538	50	14588	1298	121	8768	113	257	787	11344	679	406	1085
	'29	880	374	851	611	2716	15942	52	15994	1681	148	9334	222	472	1296	13153	1362	617	1979
Georgia	'37	814	554	3081	6368	10817	13856	420	14276	2284	132	11786	377	2378	1912	18869	1106	194	1300
	'36	531	253	2317	6133	9234	12472	210	12682	1699	136	13196	191	1812	1378	18322	854	189	1043
	'35	381	218	1646	5401	7646	12634	20	12654	1035	71	11211	154	1633	1441	15545	515	209	724
	'34	347	116	917	4845	6225	11375	22	11397	817	51	10364	98	963	1041	13334	547	228	775
	'33	297	118	818	4028	5261	5846	7	5853	525	23	9451	29	256	966	11250	315	9	324
	'32	260	120	316	949	1645	4130	23	4153	548	56	5365	24	188	437	6618	166	59	225
	'31	414	169	572	706	1861	9175	30	9205	962	76	9402	51	378	654	11523	243	171	414
	'30	353	204	523	408	1488	13812	36	13848	999	72	8041	86	367	401	9966	203	191	394
	'29	559	460	1001	678	2698	19368	30	19398	1879	64	10443	165	437	965	13953	703	328	1031
Idaho	'37	361	241	887	1751	3240	3406	131	3537	540	9	3733	29	637	517	5465	570	121	691
	'36	242	190	952	2107	3491	3234	92	3326	400	9	4368	18	537	570	5902	535	140	675
	'35	158	106	787	1691	2742	3162	3	3165	174	7	3034	15	384	428	4042	293	125	418
(Cont.)	'34	90	56	387	1140	1673	2099	2	2101	118	6	2364	9	180	177	2854	132	63	195

*Includes Marquette 1929-30. **Includes Viking 1929-30. †Includes Oakland 1929-30-31. §Includes Essex 1929-30-31-32. ††Includes Erskine 1929, Rockne 1932. ‡‡Includes Willys-Knight, Whippet 1929-30-32. §§Includes Cord. ‡Not in production.

in States from 1929 through 1937

STATES		NASH GROUP			NON-AFFILIATED MANUFACTURERS												
		LaFayette	Nash	Totals	§§Auburn	Austin	Continental	Franklin	Graham	Hupp	Packard	Pierce-Arrow	Reo	††Studebaker	‡‡Willys	Miscellaneous	Totals
Alabama	'37	***	320	320	4	‡	‡	‡	14		515		‡	256	488	10	34936
	'36	128	121	249	22	‡	‡	‡	47		323	2	1	285	128		35198
	'35	108	80	188	66	‡	‡	‡	45	22	156	1	6	156	160	23	29407
	'34	58	46	104	48	36	15		38	24	25	3	3	314	95	51	25560
	'33		17	17	19	158	27	4	28	39	17	4	14	206	114		14514
	'32		69	69	61	97		2	16	50	35	1	26	175	189	4	8375
	'31		136	136	84			7	75	99	59	3	35	269	343	67	15425
	'30		175	175	21	31		7	255	195	125	11	52	372	404	113	25535
	'29		531	531	47			38	474	318	257	10	88	599	2532	421	54264
Arizona	'37	***	302	302	5	‡	‡	‡	67	3	274		‡	225	214	2	12562
	'36	111	159	270	15	‡	‡	‡	108	8	234		4	316	76	1	12758
	'35	116	95	211	5	‡	‡	‡	70	25	108			199	81		9694
	'34	45	39	84		1			30	8	12		3	243	18		6472
	'33		23	23	3		5		1		14			135	24		3625
	'32		75	75	9			1	1		22		2	135	26	7	2529
	'31		176	176	40			3	6	38	33	3	6	160	72	47	5400
	'30		235	235	9	21		12	118	110	66	8	6	415	237	190	8985
	'29		603	603	144			36	402	234	142	20	17	747	816	713	18206
Arkansas	'37	***	213	213		‡	‡	‡	40		201		‡	241	171	10	19793
	'36	39	66	105	1	‡	‡	‡	13	2	134	1	7	211	10	12	19612
	'35	26	31	57	3	‡	‡	‡	18	11	62		6	150	6	4	17828
	'34	15	40	55	2	15	5		12	9	7	1	9	236	19		15757
	'33		38	38	6	13	7		22	12	12	5	21	84	25	8	11626
	'32		81	81	16	5		1	57	21	12	2	18	75	33	1	7094
	'31		117	117	9			2	106	21	11	3	21	79	120	30	9699
	'30		211	211	17	15		10	145	59	27	19	20	140	158	136	19303
	'29		589	589				20	267	137	64	17	59	253	1185	472	34892
California	'37	***	3698	3698	198	‡	‡	‡	1360	20	6751	31	‡	6964	9190	388	246075
	'36	1245	2553	3798	303	‡	‡	‡	2082	135	5500	88	275	8467	4981	170	256255
	'35	1492	1867	3359	466	‡	‡	‡	1607	717	3011	91	340	4718	5045	32	196967
	'34	647	1009	1656	614	47	99	17	1382	452	503	147	289	4418	2568	12	116121
	'33		901	901	760	301	149	79	929	504	696	152	299	4327	2604	72	98068
	'32		1405	1405	1206	161		73	1270	653	762	240	273	5037	1138	599	70721
	'31		2890	2890	3325			249	1666	1231	1267	399	541	5239	2673	3233	134478
	'30		3992	3992	1155	589		651	2715	1707	2530	583	989	6597	3340	4996	184312
	'29		8082	8082	1167			931	5496	3120	3795	693	1618	9525	8990	12358	255335
Colorado	'37	***	834	834	22	‡	‡	‡	125	7	644	4	‡	617	495	1	32505
	'36	311	637	948	95	‡	‡	‡	626	81	1872	23	69	1288	117	18	35721
	'35	234	252	486	72	‡	‡	‡	99	61	270	12	43	395	4	1	26055
	'34	146	139	285	63		6	3	77	19	47	17	35	417	18	1	18701
	'33		149	149	66		7	4	71	31	64	26	35	256	116	7	11739
	'32		193	193	142	1		9	98	44	60	24	26	374	261	79	10252
	'31		392	392	271			14	231	95	78	42	55	432	649	397	18277
	'30		635	635	84	55		36	411	219	159	54	69	458	887	735	26762
	'29		1218	1218	131			47	542	299	195	80	113	645	2316	1379	39065
Connecticut	'37	***	1249	1249	22	‡	‡	‡	566	7	2699	5	‡	1306	831	19	51268
	'36	311	637	948	95	‡	‡	‡	626	81	1872	23	69	1288	117	18	51342
	'35	367	337	704	176	‡	‡	‡	524	257	1052	26	97	760	88	6	40005
	'34	244	387	631	63	11		16	268	212	232	58	124	752	53	2	27347
	'33		274	274	80	18	19	45	187	145	273	54	124	751	159	9	24213
	'32		431	431	200	3		60	300	162	314	51	109	778	267	44	17578
	'31		881	881	652			116	463	387	502	147	182	876	538	326	31984
	'30		1097	1097	315	71		247	727	667	873	219	419	1266	778	646	41387
	'29		2182	2182	560			387	1384	1118	1447	254	592	1760	2353	1491	55873
Delaware	'37	***	69	69	5	‡	‡	‡	8		381		‡	146	138	3	9748
	'36	24	21	45	2	‡	‡	‡	1	1	357	2	3	114	5	3	8477
	'35	31	22	53	6	‡	‡	‡	9	9	213			68	3	1	7119
	'34	25	41	66	6				5	9	37	1	3	86	4		4868
	'33		30	30	10	8		4	6	18	46	3	3	83	18	1	4119
	'32		70	70	8	2		5	7	16	48	3	1	88	48	21	3182
	'31		77	77	32			9	10	13	85	7	4	59	96	87	5160
	'30		90	90	41	13		19	15	56	140	13	6	88	114	151	7290
	'29		333	333	92			29	45	83	146	23	11	152	339	274	8860
Florida	'37	***	471	471	50	‡	‡	‡	206	2	1503	1	‡	521	1026	131	43445
	'36	127	138	265	66	‡	‡	‡	261	13	877	15	43	486	447	30	38988
	'35	155	123	278	135	‡	‡	‡	216	83	425	3	52	363	377	119	32476
	'34	78	106	184	193	272	26	11	204	75	68	13	52	371	503		26717
	'33		47	47	48	957	62	23	129	25	49	7	40	215	532	7	17924
	'32		122	122	122	862		48	184	73	83	16	40	176	136	102	13946
	'31		297	297	296			61	393	137	128	32	82	310	292	281	25146
	'30		352	352	126	134		94	533	183	238	46	139	222	407	249	31701
	'29		684	684	114			119	669	411	344	55	150	383	1265	267	38303
Georgia	'37	***	697	697	14	‡	‡	‡	74		1431	1	‡	874	453	17	48823
	'36	235	201	436	31	‡	‡	‡	34	6	871		16	739	167		43581
	'35	140	111	251	73	‡	‡	‡	30	44	493	5	18	565	196	26	38270
	'34	58	127	185	76	53		4	84	87	99	8	33	644	230	1	33235
	'33		36	36	62	212	36	18	123	111	88	6	30	457	247	5	24119
	'32		133	133	44	210		30	118	145	100	21	28	485	163	35	14153
	'31		315	315	124			35	173	240	86	48	48	515	215	113	24915
	'30		193	193	57	36			227	210	133	34	44	464	275	265	27634
	'29		513	513	55			152	632	397	199	48	112	477	1464	226	41355
Idaho	'37	***	285	285	6	‡	‡	‡	82	1	176		‡	492	164		14139
	'36	101	126	227	7	‡	‡	‡	59	13	116		16	513	93		14438
	'35	84	77	161	15	‡	‡	‡	86	43	59		12	296	45		11084
	'34	18	53	71	4		2	1	52	18	5		2	224	14		7216

(Cont. on Page 20)

Who's Who

(Continued from Previous Page)

mgr., pur. agt.; J. G. McGreevy, sales mgr.; A. Anderson, engr.; W. A. Blackburn, prod. mgr. **Det. Rep.**—Furney-Sherwin Co., 2842 W. Grand blvd. **Adv. Agcy.** — Larcher-Horton Co., Industrial Trust bldg., Providence, R. I.

AP PARTS CORP., 1801-29 Spielbusch ave., Toledo, O. Mufflers, exhaust pipes, tail pipes. H. F. Hadley, pres.; R. G. Rule, secy.-treas.; J. J. Gallagher, Ross Hopkins, repr.; W. E. Bullock, vice-pres., sales mgr.; Frank E. Borer, adv. mgr.; B. W. Lang, engr.; L. A. Cadmus, pur. agt.; G. L. Cunningham, asst. sales mgr.; Frank W. Speaker, sales supt.; Ray Cooper, Wm. Waldeck, J. J. Gallagher, Ross Hopkins, rep. **Det. Rep.** J. J. Gallagher, 1801 Spielbusch ave., Toledo, O.

APPLETON ELECTRIC CO., 1701 Wellington ave., Chicago, Ill. Auxiliary lights of all types. A. I. Appleton, pres.; M. J. Whitfield, gen. mgr.; J. M. Sharpe, sales mgr.; C. A. Bloom, adv. mgr.; N. A. Tarnblom, engr.; W. A. Robertson, pur. agt. **Det. Rep.**—J. V. Harding, 201 Basso bldg. **Adv. Agcy.** — Aubrey, Moore & Wallace, 230 N. Michigan, Chicago, Ill.

ARCO CO., THE 7301 Bessemer ave., Cleveland, O. Also Arco Co. of California, Ltd., 745 E. 59th st., Los Angeles, Calif. Arco lacquers, enamels, primers, surfacers, unit undercoats, color machines, specialties, reducers. H. E. Wise, pres.; Paul L. Hexter, secy.; Emil Spoerry jr., treas.; Paul L. Hexter, sales mgr., (refinish sales div.); James J. Clarke, adv. mgr.; Lon J. Esther, pur. agt. **Adv. Agcy.**—Lang, Fisher & Kirk, Inc., Swetland bldg., Cleveland, O.

ARIZONA AUTOMOBILE ASSN., 21 E. Van Buren, Phoenix, Ariz. P. E. Howell, pres.; Phil A. Isley, vice-pres.; Sam G. Bailie, secy., gen. mgr.; R. E. Blair, sales mgr. **Det. Rep.**—Automobile Club of Michigan, 139 Bagley ave.

ARMSTRONG CORK PRODUCTS CO., Liberty st., Lancaster Penn. Cork products of every description, cork and synthetic compositions, flooring products for buses, trucks and passenger, linoleum, paper felt, asphalt emulsion, insulation materials. J. J. Evans, chmn.; H. W. Prentis jr., pres.; H. M. Clarke, vice-pres.; C. Dudley Armstrong, secy.; F. L. Suter, treas.; F. E. Stevens, gen. mgr.; R. M. Hill, sales mgr.; J. P. Young, adv. mgr.; R. A. Barton, pur. agt. **Det. Rep.**—F. L. Munroe, 1627 W. Fort st. **Adv. Agcy.**—Batten, Barton, Durstine and Osborne, New York City.

ARO EQUIPMENT CORP., THE Bryan, O. Lubricating equipment. J. C. Markey, pres.; I. B. Nielsen, vice-pres., gen. mgr.; M. T. Obee, sales mgr.; C. E. Ihrie, adv. mgr.; C. W. Ginter, engr.; C. H. Rice, pur. agt. **Det. Rep.**—M. J. Vierling, 5427 Grand River ave., **Adv. Agcy.**—U. S. Advertising Corp., Toledo, O.

ARROW HEAD STEEL PRODUCTS CO., 1101 Stinson blvd., Minneapolis, Minn. Pistons, piston pins, sleeves, rings, king bolts, valves, valve guides, springs and keepers, water pump parts. Wm. E. Wilbert, chmn., pres.; John D. Osborn, vice-pres.; C. V. Smith, secy.-treas.; W. C. Cheney, asst. gen. mgr.; L. H. Blevins, sales mgr.; E. A. Earle, engr.; L. O. Erdahl, pur. agt.

ASBESTOS MFG. CO., E. Sabine st., Huntington, Ind. Friction materials, brake lining and clutch facings. R. J. Evans, chmn.; F. C. Edson, vice-chmn.; A. W. Wallace, pres.; E. H. Janes, vice-pres. and sales mgr. Original Equipment Div.; P. W. Churchman, secy.; H. D. LaMont, treas., gen. mgr.; D. H. Spicer, sales mgr. Replacement Div.; R. F. Kohr, engr.; P. E. Brading, pur. agt. **Det. Rep.**—E. H. Janes, 4-251 General Motors bldg. **Adv. Agcy.**—Keeling and Co., Indianapolis, Ind.

ASHTABULA HIDE & LEATHER CO., Ashtabula, O. Manufacturing leather. H. Hill, pres., gen. mgr.; H. C. Jay, vice-pres., sales mgr.; J. W. McKay, secy.; W. C. Hubbard, treas. **Det. Rep.**—H. C. Jay, 429 New Center bldg.

ASHTON MFG. CORP., 1547 University ave., St. Paul, Minn. Automobile electric fans, hose clamps. G. A. Ashton, pres.; A. B. Ashton, vice-pres., sales mgr., adv. mgr. **Det. Rep.**—James England, 4367 Buena Vista ave.

ASSOCIATED COLOR PRINTERS OF AMERICA, 1942 Graybar bldg., New York City. Plants at 81 Clementina st., San Francisco, Calif.; 1140 Lake st., Oak Park, Ill.; 420 De Soto ave., St. Louis, Mo., and 5309 Hamilton ave., Cleveland, O. Broadsides and circulars in monotone and multi-color on newsprint in various newspaper sizes. Telfer MacArthur, pres., of Pioneer Publishing Co., chmn.; O. F. Brauer, bus. mgr., of the Cleveland Shopping News Co., secy-treas.; E. H. Dougherty, 1942 Graybar bldg., New York City, sales mgr. **Det. Rep.**—E. L. Bowman, 629 New Center bldg.

ASSOCIATES INVESTMENT CO., Associates bldg., South Bend, Ind. E. M. Morris, pres.; Lew Fleming, E. R. McEndarfer, G. W. Bavin, H. C. Williams, vice-pres.; Lew Fleming, secy.; G. O. Keasey, treas.; H. F. Fries, sales promotion. **Det. Rep.**—J. E. Hancock, 816 Maccabees bldg.

ATLANTIC MERCANTILE CO., 109-123 W. 64th st., New York, N. Y. Rubber coated fabrics, waterproof fabrics, artificial leather, automobile bindings. J. I. Fox, R. Fox, S. H. Fox, all co-partners.

(Continued on Next Page)

Who's Who

(Continued from Previous Page)

ATLANTIC METAL HOSE CO., Inc., 123 W. 64th st., New York, N. Y. Flexible, metal hose. A. Rubin, pres.; E. H. Ebin, secy.; W. D. Inman, sales mgr.; W. E. Phillips, engr.; W. D. Inman, pur. agt.

ATLAS ASBESTOS CO., 4th and Walnut sts., North Wales, Penn. Brake linings, clutch facings, cotton webbing, packings, etc. J. Carroll Johnston, pres., Wm. Wurster, secy.

ATLAS BOLT & SCREW CO., THE 1100-1144 Ivanhoe rd., Cleveland, O. Bolts, nuts, screws, rivets, washers, pins. J. Edw. Weit, pres., sales mgr.; C. R. Harbaugh, secy.-treas. **Det. Rep.**—Robert E. Murphy, Rm. 11, 6432 Cass ave.

ATLAS DROP FORGE CO., Box 239, Lansing, Mich. Drop forgings and crankshafts. R. H. Scott, pres.; E. W. Goodnow, vice-pres., gen. mgr.; O. C. Hartig, secy.-treas.; N. R. Buckingham, engr.; A. O. Peterson, pur. agt. **Det. Rep.**—A. C. Olfs, General Motors bldg. **Adv. Agcy.**—O. F. Jackson, Hollister bldg., Lansing, Mich.

ATLAS PRESS CO., 1819 N. Pitcher st., Kalamakoo, Mich. Lathes, drill presses, arbor presses, shapers, tools, attachments and accessories. J. H. Penniman, chmn., pres., gen. mgr.; G. C. Nancarrow, vice-pres., sales mgr.; A. R. Eichelberg, secy.-treas.; H. G. Dykhouse, adv. mgr.; H. Musselman, engr.; H. J. Steele, pur. agt. **Adv. Agcy.**—Staake - Schoonmaker, 1510 American Natl. Bank bldg., Kalamazoo, Mich.

ATTWOOD BRASS WORKS, Front ave. and Sixth st., Grand Rapids, Mich. Automotive hardware and machine products. Chas. E. Attwood, pres., gen. mgr.; C. H. Attwood, vice-pres., pur. agt.; B. H. Cook, secy.-treas., sales mgr.; T. S. Dysart, engr.

AUBURN MFG. CO., Pease ave. and Stack st., Middletown, Conn. Cup leather, washers, gaskets, leather straps and specialities. I. M. Wolfson, pres.; Louis Mittelman, vice-pres.; Reuben Mittelman, secy.-treas.

AULD, D. L. CO., 5th ave. and 5th st., Columbus, O. Metal embossings, finished trim, hub caps, radiator ornaments, name plates, dash trim and hardware. F. H. Auld, pres.; S. G. Brooks, vice-pres.; H. E. Auld, secy.; Wm. Mackay, sales mgr. **Det. Rep.**—Frank D. Tobin, 1104 Fisher bldg.

AURORA EQUIPMENT CO., 422 Cleveland ave., Aurora, Ill. Steel store fixtures, parts bins, racks, shop equipment. Thos. M. Dunham, pres. gen. mgr., adv. mgr.; John C. Dunham, L. F. Spangler, vice-pres.; Baldwin Sears, secy.; Floyd S. Keck, treas.; L. F. Spangler, sales mgr.; August Fauth, engr.; Baldwin Sears, pur. agt.

AUSTIN CO., THE 16112 Euclid ave., Cleveland, O. Design and construction of industrial plants, warehouses, power plants, research laboratories and automotive service stations. W. J. Austin, pres.; G. A. Bryant jr., exec. vice-pres., sales mgr.; C. W. Kinnison, secy.; A. H. Meyer, adv. mgr.; Albert S. Low, chief engr.; J. K. Gannett, vice-pres. and gen. mgr. eastern district, 19 Rector st., New York, N. Y.; P. C. McCabe, mgr., Chicago district, 510 N. Dearborn st., Chicago, Ill. **Det. Rep.**—A. F. Plant, 2842 W. Grand blvd. **Adv. Agcy.**—Fuller & Smith & Ross, Inc., Bulkley bldg., Cleveland, O.

AUSTIN TRAILER EQUIP. CO., Lake Shore dr., Muskegon, Mich. Fifth wheels, landing gears, pintle hooks, king pins, trailer castings. O. A. Seyferth, chmn., pres.; C. G. Seyferth, vice-pres., gen. mgr.; R. F. Seyferth, secy.-treas.; M. F. Feather, sales mgr., adv. mgr.; Fred Tuttle, engr.

AUTOCAR CO., THE Lancaster ave., Ardmore, Penn. Trucks, tractors and fire equipment, engines, cabs. Robert P. Page jr., pres.; J. C. Taney, vice-pres., treas.; H. M. Coale, C. R. C. Custer, vice-pres.; W. H. Brearley, secy.; Edward F. Coogan, sales mgr.; Robert F. Wood, adv. mgr.; B. B. Bachman, engr.; John E. Bower, pur. agt.; C. A. Borton, vice-pres. of prod.; F. C. Hubley, gen. svc. mgr.; Adolf Gelpke, chief engr. **Det. Rep.**—B. F. Dunham, 290 Piquette ave. **Adv. Agcy.**—Jerome B. Gray & Co., 12 S. Twelfth st., Philedelphia, Pa.

AUTOCRAT RADIO CO., 3855 N. Hamilton ave., Chicago, Ill. Auto radios. R. B. Gubbins, pres., gen. mgr.

AUTO CRUISER CO. OF AMERICA, Inc., Ostend and Scott sts., Baltimore, Md. Commercial and house trailers. R. J. Miller, pres.; R. M. Crouse, treas, gen. mgr.; T. R. Myers, sales mgr.

AUTOMATIC ELECTRICAL DEVICES CO., 324 E. Third, Cincinnati, O. Battery chargers, ozone deodorizers. Clarence E. Ogden, pres., treas., sales mgr., adv. mgr.; Harold F. Smith, C.E., vice-pres., engr.; Arthur H. Ewald, secy.; Walter Hirschire, pur. agt. **Adv. Agcy.**—Robert Acomb, Inc., 308 Sycamore St., Cincinnati, O.

AUTOMATIC MACHY. MFG. CORP., 113 E. Washington ave., Bridgeport, Conn. Automatic diamond tool boring machines, thread hobbing machines, profiling machines, automatic thread cutting lathes, cam millers, bench power presses, spindle drilling machines. George L. Sexton, pres., gen. mgr.; H. P. Hill, pur. agt.

AUTOMATIC VENTILATOR CO., Shiawassee st., Corunna, Mich. Trailer roof ventilators, stack head assemblies, water tanks, wheel housings, metal trailer equipment, automatic window ventilators and dry ice refrigerating units. F. A. Strawsine, pres., gen. mgr., sales

(Continued on Next Page)

New Passenger Car Registrations By Makes

STATES		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP							HUDSON GR'P		
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	*Buick	Cadillac	Chevrolet	LaSalle	**Oldsmobile	†Pontiac	Totals	§Terraplane	Hudson	Totals
Idaho (Cont.)	'33	45	33	248	601	927	907	6	913	62	4	1181		65	119	1431	40	3	43
	'32	33	34	59	179	305	597	3	600	78	4	752	1	30	54	919	29	17	46
	'31	120	102	196	273	691	1751	4	1755	180	2	1923		69	142	2316	53	46	99
	'30	180	170	319	269	938	4210	5	4215	378	5	3024	4	119	284	3814	162	84	246
	'29	208	286	601	433	1528	6153	7	6160	598	5	3690	8	225	569	5095	485	177	662
Illinois	'37	7022	6395	20646	32767	66830	52847	1909	54756	15359	971	47842	2339	14159	17012	97682	4981	1043	6024
	'36	4329	3504	20181	35885	63899	47619	1107	48726	11434	1046	59434	1109	13947	12759	99729	5128	1371	6499
	'35	2923	2169	13208	25801	44101	53945	197	54142	6525	576	36833	845	11847	9889	66515	3455	1359	4814
	'34	1511	1028	6426	17479	26444	28366	192	28558	4389	400	27863	345	5472	5367	43836	2146	955	3101
	'33	1901	1817	5579	14662	23959	15820	208	16028	3249	347	24454	321	2902	5726	36999	1732	149	1881
	'32	1720	1919	1849	6870	12358	12073	259	12332	2579	545	16737	389	1917	2792	24959	1460	502	1962
	'31	3205	2055	4026	5203	14489	32048	357	32405	5097	955	31477	743	4225	6167	48664	2347	1056	3403
	'30	4001	2793	4255	3932	14981	63275	516	63791	7835	869	34957	1089	3972	6205	54927	3711	1823	5534
	'29	5816	4044	7884	5490	23234	70153	748	70901	11258	1524	39570	2036	6945	15148	76481	11862	4756	16618
Indiana	'37	2992	2827	8167	17587	31573	28424	628	29052	5696	218	27118	700	6970	7950	48652	3283	580	3863
	'36	1628	1505	7768	17907	28808	25191	355	25546	4005	228	33435	294	6135	5808	49905	3764	728	4492
	'35	1170	1047	5876	14280	22373	27134	40	27174	2179	103	20773	244	5154	4339	32792	2667	857	3524
	'34	633	439	2211	10316	13599	14259	38	14297	1225	63	14574	112	2162	1874	20010	1204	545	1749
	'33	616	1076	2247	8556	12495	7863	28	7891	762	44	11873	38	1048	1761	15526	965	72	1037
	'32	627	1172	842	3086	5727	6519	59	6578	966	79	8611	43	830	1249	11778	848	323	1171
	'31	1257	1539	1613	3148	7557	13700	57	13757	1945	159	16159	91	1732	2536	22622	1405	588	1993
	'30	1300	1316	1789	2024	6429	28192	79	28271	2455	187	16219	148	1857	2892	23758	2112	968	3080
	'29	2010	2176	3575	2625	10386	40168	111	40279	3871	225	25063	286	4230	7229	40904	7619	2016	9635
Iowa	'37	1263	757	3583	8227	13830	18113	333	18446	297	72	20276	224	2603	3683	29829	1463	305	1768
	'36	1061	628	4036	9754	15479	16701	237	16938	2120	72	25263	118	2816	3069	33458	1838	413	2251
	'35	713	490	3702	9660	14565	22897	19	22916	1444	39	18908	116	2819	2933	26259	1566	550	2116
	'34	445	163	1434	5801	7843	10954	13	10967	777	25	13126	40	1215	1342	16525	974	494	1468
	'33	279	213	1215	4424	6131	6040	22	6062	417	22	10482	17	608	1287	12833	831	76	907
	'32	290	221	583	1646	2740	5044	27	5071	490	30	7243	22	386	924	9095	579	182	761
	'31	859	321	1349	2028	4557	12329	39	12368	1216	83	17200	52	1135	2352	22038	965	483	1448
	'30	1148	361	1881	2274	5664	30495	67	30562	1956	96	24919	91	1405	2534	31001	1421	693	2114
	'29	1156	785	3163	2682	7786	41046	68	41114	2904	81	27713	153	2235	4863	37949	4186	1152	5338
Kansas	'37	1114	924	3170	7168	12376	13170	272	13442	2284	50	16584	182	2629	3333	25062	1884	373	2257
	'36	708	542	2850	7778	11878	12058	154	12212	1516	68	19423	76	1995	2575	25653	1653	433	2086
	'35	511	396	2272	6744	9923	15138	11	15149	972	34	14896	78	2213	2452	20645	1440	561	2001
	'34	369	189	992	5030	6580	9513	8	9521	645	29	11077	43	1044	1174	14012	846	418	1264
	'33	240	240	893	3691	5064	5092	6	5098	415	11	9661	15	433	1469	12004	739	84	823
	'32	187	228	318	1120	1853	3979	26	4005	405	36	5474	15	228	735	6893	434	172	606
	'31	348	199	706	1010	2263	7999	15	8014	920	54	11250	34	453	1520	14231	667	399	1066
	'30	590	413	1125	1078	3206	18175	31	18206	1663	55	13705	47	531	1774	17775	996	616	1612
	'29	827	896	2104	1745	5572	28071	35	28106	2745	77	16626	115	1299	3893	24755	2996	1271	4267
Kentucky	'37	1015	577	3237	5939	10768	10229	172	10401	1802	79	10502	252	1741	2069	16445	794	118	912
	'36	696	366	3044	6277	10383	8710	128	8838	1438	73	12943	116	1655	1802	18027	826	176	1002
	'35	613	245	2666	5336	8860	10385	16	10401	741	39	10561	91	1408	1490	14330	579	150	729
	'34	408	119	1350	4812	6689	6999	25	7024	572	28	8310	51	709	864	10534	409	128	537
	'33	467	269	1338	4107	6181	3861	21	3882	287	39	7253	11	241	653	8484	294	19	313
	'32	340	286	444	1569	2639	3819	23	3842	325	22	4798	9	117	390	5661	346	65	411
	'31	819	323	939	1653	3734	7852	24	7876	515	35	9781	29	221	777	11358	563	185	748
	'30	782	395	923	1192	3292	15023	39	15062	715	54	9733	53	277	832	11664	933	282	1215
	'29	934	735	1841	1294	4804	19839	49	19888	1163	94	13201	190	802	1724	17174	2851	539	3390
Louisiana	'37	702	325	2293	4630	7950	9950	292	10242	1330	57	9264	175	1379	1042	13247	546	102	648
	'36	465	213	2107	4817	7602	10333	240	10573	1115	81	13440	140	1342	1035	17153	453	116	569
	'35	253	132	1675	3216	5276	9697	32	9729	591	42	9611	99	1197	1035	12575	236	98	334
	'34	167	94	914	3156	4331	7560	19	7579	428	38	8560	39	577	431	10073	199	72	271
	'33	130	103	813	1963	3009	4665	18	4683	231	32	6865	25	170	362	7685	136	17	153
	'32	98	124	343	552	1117	3509	24	3533	273	54	4048	15	143	247	4780	69	23	92
	'31	359	262	525	594	1740	5873	22	5895	424	32	6918	30	210	446	8060	170	99	269
	'30	512	405	816	459	2192	11710	26	11736	696	53	7641	50	242	776	9458	300	186	486
	'29	734	635	1345	856	3570	19282	38	19320	1192	54	11023	100	565	2007	14941	886	343	1229
Maine	'37	457	403	1385	2516	4761	3925	143	4068	1206	69	4339	197	1181	1659	8651	577	141	718
	'36	193	124	1263	2257	3837	3640	62	3702	994	81	4928	90	1139	1208	8440	562	179	741
	'35	151	82	745	1686	2664	3623	8	3631	530	43	3238	52	808	875	5546	346	137	483
	'34	150	53	509	1510	2222	3025	7	3032	460	34	3123	42	437	636	4732	509	248	757
	'33	93	86	472	1407	2058	1910	9	1919	319	17	2547	27	267	696	3873	526	36	562
	'32	103	71	176	745	1095	1646	11	1657	419	35	2274	34	208	600	3570	404	106	510
	'31	322	131	425	802	1680	4017	11	4028	817	71	3866	59	428	1128	6369	880	316	1196
	'30	496	261	523	759	2039	5828	21	5849	919	91	3551	86	406	938	5991	1115	352	1467
	'29	604	247	681	745	2277	6661	26	6687	1223	82	4106	165	568	1265	7409	2122	529	2651
Maryland	'37	1418	880	3291	6555	12144	9621	278	9899	2916	147	11406	408	2110	2804	19791	887	192	1079
	'36	921	380	3148	7307	11756	9282	146	9428	2464	143	12543	169	1933	2351	19603	827	223	1050
	'35	809	315	2402	5779	9305	10000	16	10016	1436	91	9142	126	1690	2092	14577	521	221	742
	'34	462	118	1136	4300	6016	6144	11	6155	845	44	7905	56	835	1022	10707	398	194	592
	'33	518	266	897	3337	5018	3605	11	3616	554	34	6810	39	459	1408	9304	526	50	576
	'32	385	337	390	1490	2602	4036	15	4051	560	61	6868	41	233	863	8626	465	146	611
	'31	665	259	518	1296	2738	7834	33	7867	1164	93	11191	68	423	1725	14664	664	261	925
	'30	809	253	587	739	2388	13916	39	13955	1728	112	10845	137	567	1464	14853	939	375	1314
	'29	1126	473	1138	1018	3755	15255	70	15325	2292	135	11001	218	905	2327	16878	2556	741	3297
Massachusetts	'37	3057	2098	9701	15032	29888	22283	809	23092	7249	602	21866	1561	8686	7893	47857	2115	575	2690
	'36	1749	933	9411	17392	29485	24141	521	24662	6855	638	25808	773	9202	6871	50147	2734	1009	3743
	'35	1489	517	5889	11133	19028	26481	105	26586	3821	309	18966	573	6908	4758	35335	1778	1010	2788
	'34	1035	375	3931	9547	14888	20025	112	20137	3727	254	16337	277	3129	3354	26478	2389	1295	3684
	'33	1282	753	3413	9204	14652	13400	113	13513	2389	174	17276	266	1790	4773	26668	2702	279	2981
	'32	1036	687	1138	5262	8123	11163	184	11347	2912	241	12613	271	1485	3230	20752	2334	597	2931
	'31	2175	625	2390	3795	8985	26175	194	26369	5281	586	20377	595	2436	4590	33865	3871	1350	5221
	'30	2627	944	3278	2062	8911	41224	214	41438	5624	694	17380	819	1961	3912	30390	4996	1875	6871
(Cont.)	'29	3664	1720	5016	2311	12711	37234	268	37502	7323	913	20235	1545	2770	7336	40122	10696	3178	13874

in States from 1929 through 1937

STATES		NASH GROUP			NON-AFFILIATED MANUFACTURERS												
		LaFayette	Nash	Totals	§§Auburn	Austin	Continental	Franklin	Graham	Hupp	Packard	Pierce-Arrow	Reo	††Studebaker	‡‡Willys	Miscellaneous	Totals
Idaho (Cont.)	'33		29	29	8	1		1	26		5		4	48	23	4	3463
	'32		56	56	27	4		2	36	3	1		7	51	37	15	2109
	'31		115	115	51	18		6	70	13	10		25	130	149	110	5558
	'30		170	170	14			11	132	34	21		31	173	209	257	10265
	'29		365	365		32		15	211	78	30	3	48	305	724	765	16021
Illinois	'37	***	7921	7921	154	‡	‡	‡	945	54	7732	9	‡	5387	2532	179	250205
	'36	1465	2520	3985	408	‡	‡	‡	994	128	5339	46	244	5348	226	567	236138
	'35	1532	1813	3345	594	‡	‡	‡	936	452	2731	49	222	2921	96	1284	182202
	'34	616	1064	1680	600	8	73	26	805	392	639	191	216	2580	58	80	109287
	'33		756	756	404	21	177	117	637	424	845	185	185	2032	749	61	85460
	'32		1495	1495	1038	13		126	922	668	918	239	230	2678	1817	409	62164
	'31		2854	2854	3092			244	1222	1228	1491	311	414	3213	3092	1707	117829
	'30		3616	3616	1290	144		670	1918	1995	2440	407	645	4439	3729	2861	163387
	'29		8949	9687	1899			562	4877	3413	3876	420	1210	6338	10533	6598	236647
Indiana	'37	***	1978	1978	114	‡	‡	‡	357	10	1989	2	‡	4034	2336	12	123972
	'36	464	486	950	322	‡	‡	‡	580	58	1628	5	81	3583	309	13	116280
	'35	575	428	1003	480	‡	‡	‡	548	265	686	16	70	1839	247	12	91029
	'34	215	265	480	401	15	87	1	379	175	78	17	53	1695	108	3	53147
	'33		137	137	261	45	150	4	323	130	116	18	45	1485	471	42	40176
	'32		269	269	384	15		39	317	197	154	30	54	1317	931	241	29202
	'31		670	670	1088			60	475	427	219	46	126	1429	1841	719	53029
	'30		965	965	466	102		81	709	492	413	70	179	1773	1808	1282	69878
	'29		2269	2269	896			99	1711	810	736	112	279	3251	6734	3142	121243
Iowa	'37	***	1293	1293	5	‡	‡	‡	235	5	836		‡	1214	730	5	68196
	'36	434	519	953	24	‡	‡	‡	344	43	664	1	55	1540	113	20	71883
	'35	577	350	927	55	‡	‡	‡	287	195	369		56	1142	65	3	68955
	'34	197	218	415	47	3	28	1	110	126	37	7	33	962	40	7	38619
	'33		157	157	18	11	163	2	72	82	60	6	32	602	126	22	27286
	'32		226	226	94	10		3	102	66	92	6	40	543	610	66	19525
	'31		598	598	327			16	283	248	156	9	94	757	1805	550	45254
	'30		1019	1019	208	95		40	588	430	281	33	166	1095	2578	1111	76985
	'29		2030	2030	343			39	1159	755	362	17	176	1326	7273	2693	108360
Kansas	'37	***	937	937	11	‡	‡	‡	119		685	2	‡	916	504	4	56315
	'36	270	321	591	20	‡	‡	‡	134	13	414	6	66	955	13		54041
	'35	250	217	467	69	‡	‡	‡	214	67	210	8	79	812	17	4	49665
	'34	115	149	264	63	10	11	2	142	34	19	14	50	929	19	1	32935
	'33		102	102	29	11	19	6	100	54	32	16	48	621	197	14	24238
	'32		163	163	98	14		10	92	70	38	28	21	431	433	34	14789
	'31		382	382	143	74		18	166	96	64	19	94	527	924	201	28282
	'30		679	679	45	94		21	276	213	117	31	126	583	1364	431	44779
	'29		1859	1859	162			54	663	397	186	56	292	1183	4580	1409	73541
Kentucky	'37	***	548	548	6	‡	‡	‡	105	1	946	1	‡	631	620	7	41391
	'36	117	147	264	38	‡	‡	‡	193	21	662	8	37	556	80		40109
	'35	167	129	296	41	‡	‡	‡	244	92	319	3	21	368	56	2	35762
	'34	112	95	207	44	18	12	1	159	88	150	10	23	447	45	1	25889
	'33		64	64	83	87	85	16	94	92	70	21	31	495	309	9	20316
	'32		101	101	126	53		15	65	95	93	13	42	478	390	68	14092
	'31		198	198	192			13	116	228	111	22	84	394	984	315	26373
	'30		290	290	109	56		61	236	273	166	32	157	519	1081	445	34658
	'29		643	643	170			59	575	457	336	54	223	761	3245	1071	52850
Louisiana	'37	***	483	483	7	‡	‡	‡	30	5	505	4	‡	525	403	35	34084
	'36	183	246	429	12	‡	‡	‡	35	5	380	14	26	590	81	2	37471
	'35	249	199	448	17	‡	‡	‡	40	30	263	12	11	398	121	25	29279
	'34	181	181	362	21	41	1		41	32	47	5	14	355	98	1	23272
	'33		178	178	14	66	15	6	40	26	38	6	17	260	99	5	16300
	'32		298	298	65	123		14	56	47	54	8	14	295	101	30	10627
	'31		480	480	108			17	92	145	68	29	22	392	168	108	17593
	'30		716	716	52	43		67	220	194	129	28	35	362	300	196	26214
	'29		1353	1353	99			40	421	360	180	55	70	528	973	333	43472
Maine	'37	***	496	496	5	‡	‡	‡	113		572	1	‡	433	230		20048
	'36	137	156	293	6	‡	‡	‡	104	2	386	2	3	353	21		17890
	'35	117	100	217	10	‡	‡	‡	112	25	201	6	12	197	4	3	13111
	'34	121	187	308	2				99	24	29	7	34	316	11		11573
	'33		146	146	1	2	8	11	94	21	52	8	42	248	28	1	9074
	'32		225	225	30			17	84	30	89	11	36	394	140	20	7908
	'31		451	451	129			36	152	102	120	10	68	417	372	132	15262
	'30		536	536	33	22		54	153	141	191	31	86	528	565	317	18003
	'29		887	887	20			123	204	135	290	25	249	559	1198	684	23398
Maryland	'37	***	493	493	28	‡	‡	‡	120	3	1521	4	‡	774	507	8	46371
	'36	116	275	391	26	‡	‡	‡	65	13	995	22	13	844	22		44228
	'35	212	241	453	48	‡	‡	‡	132	82	562	29	12	607	10	3	36578
	'34	155	233	388	160	12	3	15	120	53	86	33	15	566	9		24930
	'33		154	154	169	22	21	11	169	89	146	38	37	562	238	23	20193
	'32		282	282	239	5		32	179	115	189	39	55	636	363	73	18097
	'31		550	550	361			67	300	287	245	60	104	618	577	274	29637
	'30		635	635	94	31		103	472	357	363	93	146	790	763	486	36843
	'29		1228	1228	129			142	626	632	488	112	189	763	1920	1046	46530
Massachusetts	'37	***	2909	2909	36	‡	‡	‡	613	10	4931	20	‡	2347	1156	54	115603
	'36	630	1475	2105	76	‡	‡	‡	564	37	3773	79	150	2122	86	232	117261
	'35	804	911	1715	122	‡	‡	‡	450	346	2125	74	226	1269	45	14	90123
	'34	535	1197	1732	86	38	2	21	443	383	383	127	295	1783	46	10	70536
	'33		1026	1026	116	88	71	114	389	501	626	155	272	1597	440	39	63248
	'32		1686	1686	469	26		129	542	595	704	202	247	2045	812	194	50804
	'31		2768	2768	1564			328	668	966	1001	419	412	2226	1524	842	87158
	'30		3127	3127	570	160		519	1117	1320	1952	594	753	2705	2239	1663	104329
	'29		5465	5465	692			878	2522	2216	3319	563	1197	3457	5785	3823	134126

(Cont. on Page 22)

Who's Who

(Continued from Previous Page)

mgr.; N. M. Warner, secy.; George F. Earl, engr.

AUTOMOBILE DEALERS ASSN. OF WEST VIRGINIA, 403 Professional bldg., Charleston, W. Va. Trade association. M. M. Moorhead, pres.; H. B. Long, S. C. Catron, vice-pres.; Lawrence E. Rollins, secy. gen. mgr.; J. F. Willis, treas.

AUTOMOBILE MANUFACTURERS ASSN., 366 Madison ave., New York, N. Y. Alvan Macauley, pres., Packard Motor Car Co., pres.; Alfred P. Sloan jr., chmn of brd., General Motors Corp., first vice-pres.; Charles W. Nash, chmn. of brd., Nash-Kelvinator Corp., vice-pres., passenger car div.; Robert F. Black, pres., White Motor Co., vice-pres., commercial car division; Alfred Reeves, New York, vice-pres. and gen. mgr.; Pyke Johnson, Washington, D. C., vice-pres.; Byron C. Foy, pres., De Soto, Motor Corp., secy.; F. J. Haynes, Detroit, treas.

AUTOMOTIVE GEAR WORKS, Inc., 8th and South O sts., Richmond, Ind. Rear axle drive and pinion gears (spiral, hypoid and straight tooth), steel flywheel gears, axle and propeller shafts, differential and internal parts. C. E. Hamilton, pres., gen. mgr.; G. W. Frame, vice-pres., treas.; Aileen Beissman, secy.; L. A. Dunham, sales mgr.; Lester Wright, engr. **Det. Rep.**—E. H. Vogel, 7-252 General Motors bldg. **Adv. Agcy.**—Keeling & Co., Inc., Indianapolis, Ind.

AUTOMOTIVE SALES CO., 603 New Center bldg., Detroit, Mich. Sales representatives for Atlantic Tubing & Rubber Co., Providence, R. I. E. B. Fraser, owner.

AUTOMOTIVE THRUST BEARINGS CORP., 2021 S. Michigan ave., Chicago, Ill. A. T. B. thrust bearings. Frank C. Kip, pres., gen. mgr.; M. E. Anderson, vice-pres.

AUTO SPECIALTIES MFG. CO., Graves st., St. Joseph, Mich. Malleable iron castings, electric furnace steel castings, grey iron castings, automotive jacks and machined parts. J. W. Tiscornia, pres.; W. V. Tiscornia, vice-pres.; E. J. Martin, secy.-treas.; W. W. Carver, asst. gen. mgr., sales mgr.; C. H. Williams, adv. mgr.; M. B. Lucker, engr.; W. W. Carver, pur. agt.; E. Millhouse, asst. pur. agt.

AUTO TRUCK STEEL BODY CO., 3028 Carroll ave., Chicago, Ill. Steel dump bodies, custom built trailers, derricks, roofer winches. E. J. Dondlinger, pres., gen. mgr., sales mgr., adv. mgr.; A. F. Huber, vice-pres.; S. T. Arl, secy.; George Winkelmaier, treas.; M. W. Green, engr., pur. agt.

B

BACON VULCANIZER MFG. CO., 1267 67th st., Oakland, Calif. Recapping molds, section molds, tube plates, tire changers. Thos. P. Bacon sr., pres.; Thomas P. Bacon jr., vice-pres.; F. B. Bankhead, secy.; Harold Baker, sales mgr.; Paul Weiman, engr. **Adv. Agcy.**—Reinhardt Agency, 324 13th st., Oakland, Calif.

BADGER TRAILER & BODY CORP., 415 S. Third st., Milwaukee, Wis. Semi-trailer and truck bodies, sales cars. A. A. Lienemann, pres., treas., gen. mgr.; Fred C. Lienemann, vice-pres.; Frank J. Holehouse, secy., pur. agt.

BAKELITE CORP., 247 Park ave., New York City. Molding, coating, impregnating materials, cements, bonding resins, synthetic resins, cast resinoids, resinoid varnishes. Dr. L. H. Baekeland, pres.; L. M. Rossi, vice-pres.; George Baekeland, secy.; C. Lansing Hays, treas.; Gordon Brown, sales mgr.; Allan Brown, adv. mgr.; T. J. Major, pur. agt. **Det. Rep.**—Bakelite Corp., 807 Stephenson bldg., Grand blvd. **Adv. Agcy.**—Rickard & Co., 330 W. 42nd st., New York City.

BAKER BROS., Inc., Post st., Toledo, O. Drilling, keyseating and boring machines, contour grinders. William Baker, pres.; A. L. Baker, G. E. Hallenbeck, vice-pres.; R. K. Chapman, secy.-treas.; H. L. Tigges, sales mgr.; Glo Temple, engr. **Det. Rep.** — The Motch & Merryweather Machy. Co., 2842 W. Grand blvd. **Adv. Agcy.**—Meldrum & Fewsmith, Inc., Toledo, O.

BAKER-RAULANG CO., 2168 W. 25th st., Cleveland, O. Commercial truck bodies, power industrial trucks. E. J. Bartlett, pres., gen. mgr.; E. J. Stahl, vice-pres.; J. W. Moran, secy.-treas.; Carl Geiger, sales mgr., comm. body div.; D. L. Darnell, sales mgr., ind. truck div.; K. D. Tracy, adv. mgr.; P. E. Hawkins, engr., comm. bodies; B. F. Stoner, engr., ind. trucks; Paul Rebeta, pur. agt., comm. bodies; E. W. Sankey, pur. agt., ind. trucks; F. C. Stier, fcty. mgr., comm. bodies; E. H. Remde, fcty. mgr. ind. trucks. **Adv. Agcy.**—G. M. Basford Co., Cleveland, O.

BALDOR ELECTRIC CO., 4351-63 Duncan ave., St. Louis, Mo. Battery chargers, racks, testers and bulbs, electric motor grinders. E. C. Ballman, chmn., pres., gen. mgr., engr.; E. Doerr, vice-pres.; O. A. Baumann, secy.; E. W.

(Continued on Next Page)

Who's Who

(Continued from Previous Page)

Bruce, sales mgr., adv. mgr.; J. A. Kay, pur. agt.; G. A. Schock, sales mgr., automotive div. **Det. Rep.**—W. M. Hamilton, 22612 Beach st., Dearborn, Mich. **Adv. Agcy.**—O. A. Life, 516 Beaumont st., St. Louis, Mo.

BALDWIN-DUCKWORTH CHAIN CORP., 369 Plainfield st., Springfield, Mass. Duckworth timing chains. G. H. Empsall, pres., gen. mgr.; W. E. Gilbert, vice-pres.; G. D. Gilbert, secy., sales mgr.; F. J. Weschler, treas.; A. T. Arnold, adv. mgr.; J. F. McCann, engr.; E. J. Greene, pur. agt. **Det. Rep.**—K. B. Brandenburg, 2-128 General Motors bldg. **Adv. Agcy.**—Gallen Snow, Inc., 95 State st., Springfield, Mass.

BALDWIN RUBBER CO., 366 S. Boulevard, E., Pontiac, Mich. Rubber goods; molded, extruded and sheet rubber. Samuel C. Clark, pres.; Harry M. Pryale, vice-pres., sales mgr.; E. C. Shephard, secy.-treas.; Angus MacDonald, engr.; E. C. Shephard, pur. agt.

BANTAM BEARINGS CORP., 3702 W. Sample st., South Bend, Ind. Ball bearings, thrust and radial; roller bearings, straight radial roller and straight roller thrust bearings, and tapered roller bearings. F. W. Deming, pres.; A. H. Frauenthal, vice-pres., gen. mgr.; W. T. Bell, secy.-treas.; R. B. Nichols, sales mgr., adv. mgr.; S. R. Thomas, engr.; G. D. Hardy, pur. agt.; J. F. Oehlhoffen, asst. sales mgr. **Det. Rep.**—E. J. Kleist, S. M. Albertson, 707 Stephenson bldg. **Adv. Agcy.**—MacDonald Cook Co., Sherland bldg., South Bend, Ind.

BANTAM TRAILER SALES CO., P. O. box 227, Butler Pa. Utility trailer and tow bars for Bantam cars; trailers, towing bars and hooks. W. L. Hall, sales mgr.; E. L. Walter, secy.

BARBER-COLMAN CO., River and Loomis st., Rockford, Ill. Automatic spoolers, warpers, hobs, reamers, sharpeners, etc. H. D. Colman, pres.; H. A. Severson, vice-pres., gen. mgr.; R. J. Miller, secy.-treas.; R. A. Horner, sales mgr.; E. V. Eastman, adv. mgr.; S. M. Ransome, engr.; H. W. Bails, pur. agt. **Det. Rep.**—Hodges Machy. Co., 101 E. Baltimore ave. **Adv. Agcy.**—C. A. Corrigan, 825 N. Main st., Rockford, Ill.

BARGMAN, THEODORE, 5200 Loraine ave., Detroit, Mich. Trailer hardware and equipment, hitches, lifting devices, pumps, sinks, lighting fixtures, locking door handles, lamps. Theo. Bargman, gen. mgr., sales mgr.; J. G. Gottschalk, adv. mgr., pur. agt.; Leroy Hollenbeck, engr.

BARNES DRILL CO., 814 Chestnut st., Rockford, Ill. Metal working self-oiling all geared drilling and tapping machines, honing machines. J. E. Andress, chmn.; A. M. Johnson, pres.; W. M. Fairbairn, vice-pres., works mgr.; Reed M. Andress, vice-pres., foreign mgr.; A. G. Block, secy.-treas.; Ronald S. Walker, sales mgr.; Galen E. Andrews, pur. agt. **Det. Rep.**—English & Miller Mchy. Co., 6360 Epworth blvd. **Adv. Agcy.**—C. A. Corrigan, 825 N. Main st., Rockford, Ill.

BARNES-GIBSON-RAYMOND Division of Associated Spring Corp., 6400 Miller ave., Detroit, Mich. Springs, valve, clutch, all mechanical types. L. D. Adams, gen. mgr.; W. J. Black, sales mgr.; F. P. Zimmerli, chief engr.; L. E. Hilts, pur. agt.

BARRETT-CRAVENS CO., 3255 W. 30th st., Chicago, Ill. Hand lift-trucks, lift-truck platforms, portable elevators, structural steel storage racks, drain racks, floor trucks. A. M. Barrett, pres.; E. J. Heimer, vice-pres., sales mgr., adv. mgr.; O. M. Lund, secy., engr.; J. F. Lamey, treas.; G. Collinet, pur. agt. **Det. Rep.**—E. C. White, 812 Donovan bldg.

BARR RUBBER PRODS. CO., THE Sandusky, O. Mechanical and industrial rubber, sponge rubber. **Det. Rep.**—A. L. Moses Co., 637 New Center bldg.

BASSICK CO., THE 38 Austin st., Bridgeport, Conn. Hood fasteners, hood hinges, trunk locks, starter pedals, door dovetails, robe cord and assist strap fixtures, truck casters. W. A. Rose, pres., gen. mgr.; T. T. Logie, W. G. Reycroft, W. F. Herold, vice-pres.; J. T. Foerth, asst. secy., asst. treas.; J. W. Storrs, sales mgr. auto hdw. div.; R. D. Mount, adv. mgr.; T. T. Logie, engr.; M. L. Greenstein, pur. agt. **Det. Rep.**—H. V. Rohm, 3-140 General Motor bldg.

FASTIAN-BLESSING CO., THE 240 E. Ontario st., Chicago, Ill. RegO welding and cutting equipment, valves, regulators, economizer. L. G. Blessing, pres.; E. N. Krein, E. L. Mills, vice-pres.; A. C. Krein, secy.-treas; M. E. Steczynski, adv. mgr.; W. C. Buttner, engr.; A. L. Augur, pur. agt. **Det. Rep.**—H. A. Goodwin (dist. mgr.), 240 E. Ontario st., Chicago; National Cylinder Gas Co., distributor, 7332 Oakland ave., Detroit. **Adv. Agcy.**—L. W. Ramsey Co., 230 N. Michigan ave., Chicago, Ill.

BATES LUDINGTON CO., W. Filer st., Ludington, Mich. Replacement cylinder heads. K. L. Ashbacker, pres., gen. mgr., sales mgr.; J. Sniegowski, vice-pres.; A. H. Burch, secy.-treas.; S. Meers, pur. agt.

BEALL TOOL DIVISION, Hubbard & Co., East Alton, Ill. Lock washers. C. L. Peirce jr., pres.; E. Wessell, vice-pres. in chge. **Det. Rep.**—Sidney Norwood, 11-253 General Motors bldg.

BEAN, JOHN MFG. CO., Lansing, Mich. Automotive service station equipment, car washers, wheel aligners, brake testers, headlight testers, welders, vacuum

(Continued on Next Page)

Figures in this table by R. L. Polk & Co., New Jersey Motor List Co. and Sherlock & Arnold

New Passenger Car Registrations By Makes

STATES		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP							HUDSON GR'P		
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	*Buick	Cadillac	Chevrolet	LaSalle	**Oldsmobile	†Pontiac	Totals	§Terraplane	Hudson	Totals
Michigan	'37	4163	4137	15206	27443	50949	72023	1807	73830	14936	482	49038	1787	11802	16373	94418	6429	1168	7597
(Cont.)	'36	2677	2055	16720	25919	47371	66496	1358	67854	11574	636	56737	931	10929	12534	93341	7591	1651	9242
	'35	1767	1110	10335	18484	31696	72074	229	72303	5635	389	36164	921	9998	11849	64956	5125	1807	6932
	'34	1089	549	4511	13053	19202	43160	139	43299	3724	330	25319	405	4527	4220	38525	3331	1531	4862
	'33	1125	824	6235	10936	19120	26468	120	26588	1781	192	22253	185	2299	5431	32141	3463	190	3653
	'32	1122	1541	1350	5408	9421	20515	228	20743	2030	405	14222	208	1688	2337	20890	2440	760	3200
	'31	2090	1340	2823	6178	12431	29683	199	29882	4422	667	26397	284	3610	4795	40175	3241	1363	4604
	'30	1810	1291	2280	3165	8546	68916	188	69104	5915	862	27623	583	3478	4507	42968	4170	2115	6285
	'29	3733	3839	5407	5066	18045	91832	348	92180	12239	917	47621	1346	8029	13508	83660	20163	5716	25879
Minnesota	'37	1993	1747	4955	11204	19899	22459	493	22952	3693	113	20148	324	3241	4600	32119	1609	261	1870
	'36	1316	1003	4445	12833	19597	18686	265	18951	2927	116	25821	153	3150	3873	36040	1987	381	2368
	'35	922	463	3072	9840	14297	21046	26	21072	1704	59	17072	131	2922	3203	25091	1460	394	1854
	'34	566	146	1112	5874	7698	10705	31	10736	1020	44	12639	51	1229	1029	16012	731	289	1020
	'33	516	272	1173	5274	7235	6730	35	6765	797	49	10863	53	705	1548	14014	494	50	544
	'32	591	294	450	2532	3867	5785	58	5843	789	62	8536	53	682	1197	11319	420	197	617
	'31	1267	380	953	3089	5689	11666	45	11711	1509	115	16839	79	1275	2277	22094	789	455	1244
	'30	1459	443	1037	2601	5540	27971	56	28027	1849	104	17914	173	1062	2700	23802	1154	577	1731
	'29	1416	748	1829	2956	6949	35788	86	35874	2432	102	17193	224	1871	5358	27180	3385	1018	4403
Mississippi	'37	271	197	955	2905	4328	7021	116	7137	892	12	7928	61	561	820	10274	283	22	305
	'36	178	85	1031	3478	4772	6783	80	6863	576	6	10860	31	442	614	12529	328	41	369
	'35	143	56	588	2071	2858	6816	4	6820	290	6	7759	18	339	604	9016	175	44	219
	'34	121	27	416	2267	2831	4937	3	4940	233	6	6848	9	192	405	7693	123	26	149
	'33	98	33	243	1271	1645	2852	5	2857	101	6	5274	3	50	378	5812	65	3	68
	'32	52	35	63	220	370	1833	8	1841	99	1	3053	2	42	91	3288	19	4	23
	'31	168	41	134	200	543	3572	5	3577	205	3	4271	6	43	188	4716	43	23	66
	'30	428	203	331	185	1147	9851	17	9868	662	16	7200	20	78	249	8225	117	65	182
	'29	652	399	793	522	2366	18699	18	18717	943	21	11064	35	164	613	12840	396	177	573
Missouri	'37	1618	1980	5812	12813	22223	20137	621	20758	4237	204	25331	588	4546	4778	39684	1294	270	1564
	'36	1126	921	5514	12264	19825	18967	296	19263	3040	221	30568	305	4304	4339	42777	1280	340	1620
	'35	901	626	4034	10463	16024	23526	56	23582	1761	127	21100	293	4120	3472	30873	872	319	1191
	'34	597	416	2454	9544	13011	14957	60	15017	1297	119	17660	129	2342	2215	23762	694	331	1025
	'33	712	790	2774	8999	13275	7850	65	7915	1003	72	16431	100	1107	2440	21153	665	69	734
	'32	666	1086	1070	4098	6920	8543	97	8640	1324	128	13956	97	883	1661	18049	719	190	909
	'31	1064	646	1649	2776	6135	16218	88	16306	2164	192	22191	146	1358	2748	28799	1024	355	1379
	'30	1247	738	1877	2018	5880	34351	102	34453	2897	231	24924	279	1867	2954	33152	1934	620	2554
	'29	1488	1066	3429	2134	8117	39640	153	39793	4056	280	26537	455	2971	5298	39597	5004	1122	6126
Montana	'37	623	271	1023	2208	4125	3915	191	4105	687	12	4735	64	859	696	7253	550	201	751
	'36	508	202	1429	2871	5010	4688	133	4821	598	16	6040	36	793	562	8045	1037	321	1358
	'35	361	104	1089	2683	4237	4873	3	4876	246	5	4460	37	636	667	6051	677	257	934
	'34	170	65	550	1631	2416	2577	3	2580	195	3	2897	10	281	368	3754	284	112	396
	'33	122	59	353	998	1532	1248	3	1251	185	6	1947	5	173	416	2732	146	15	161
	'32	86	70	87	353	596	1014	2	1016	174	6	1411	2	60	276	1929	74	43	117
	'31	258	139	216	369	982	2311	3	2314	337	10	2595	15	133	420	3510	155	109	264
	'30	255	190	315	360	1120	4265	6	4271	365	17	3237	25	142	419	4205	275	161	436
	'29	458	305	878	874	2515	6599	7	6606	803	27	4716	30	402	1049	7027	928	323	1251
Nebraska	'37	699	447	1564	4267	6977	9173	251	9424	1532	28	9936	107	1394	1722	14719	531	108	639
	'36	531	260	1946	5581	8318	9423	157	9580	1292	24	13019	42	1438	1531	17346	619	142	761
	'35	375	223	1676	4986	7260	11713	13	11726	763	19	9204	49	1583	1616	13234	464	204	668
	'34	210	128	659	3213	4210	6921	14	6935	422	17	7088	17	813	809	9166	427	165	592
	'33	155	92	566	2796	3609	3770	7	3777	289	13	6464	10	376	816	7968	254	14	268
	'32	172	60	206	721	1159	3433	20	3453	344	19	4143	18	231	557	5312	141	66	207
	'31	440	113	536	1200	2289	8136	21	8157	785	28	9641	14	458	893	11819	260	127	377
	'30	718	212	1028	1430	3388	17566	38	17604	1305	32	12754	30	717	1063	15901	432	164	646
	'29	888	567	1900	1840	5201	26020	50	26070	2325	55	15541	66	1277	3058	22322	1324	367	1691
Nevada	'37	183	150	310	623	1266	713	75	788	353	26	997	90	207	272	1945	100	43	143
	'36	108	112	389	754	1363	1039	51	1090	221	42	1151	40	255	283	1992	119	73	192
	'35	53	42	266	522	883	983	4	987	86	20	705	38	231	204	1284	44	39	83
	'34	33	16	141	365	555	669	1	670	76	9	665	10	120	93	973	37	36	73
	'33	21	27	49	216	313	316	1	317	55	4	431	8	34	87	619	3	1	4
	'32	50	28	35	121	234	310	7	317	115	12	394	7	24	47	599	5	15	20
	'31	143	40	74	103	360	726	8	734	117	13	680	13	34	56	913	50	34	84
	'30	161	90	168	111	530	1174	5	1179	226	7	664	19	78	62	1056	113	95	208
	'29	184	92	283	88	647	1294	8	1302	369	29	788	36	114	123	1459	208	152	360
New Hampshire	'37	280	197	904	1646	3027	2484	89	2573	798	32	2890	102	928	808	5558	318	75	393
	'36	172	103	822	1659	2756	2596	60	2656	730	48	3134	33	911	634	5490	282	112	394
	'35	123	52	624	1263	2062	2740	5	2745	398	23	2507	41	651	477	4097	259	115	374
	'34	81	42	351	953	1427	2108	14	2122	357	13	2255	11	321	294	3251	360	131	491
	'33	113	83	266	854	1316	1545	6	1551	211	10	2051	7	182	393	2854	327	6	333
	'32	107	111	89	656	963	1292	16	1308	272	11	1443	10	127	308	2171	193	44	237
	'31	207	103	188	560	1058	2862	19	2881	452	36	2692	30	346	578	4134	331	136	467
	'30	296	193	205	295	989	4023	13	4036	588	46	2315	28	249	375	3601	355	137	492
	'29	340	321	354	341	1356	3773	9	3779	676	32	2579	56	368	681	4392	851	242	1093
New Jersey	'37	3822	3253	11227	15238	33540	20077	861	20938	10300	674	21558	1513	7612	10190	51847	2285	631	2916
	'36	2393	1621	9914	16711	30639	18978	604	19582	8053	695	25229	721	7539	8115	50352	1846	648	2494
	'35	1433	977	6814	11116	20340	23330	104	23434	4375	408	17642	638	5923	5835	34821	1203	639	1842
	'34	992	392	3638	8736	13758	15212	93	15305	3454	279	15495	221	2812	3675	25936	1172	724	1896
	'33	1370	894	3345	8095	13704	9874	101	9975	2614	243	16065	245	1841	5455	26463	1269	120	1389
	'32	1393	1072	1137	5451	9053	8488	150	8638	3206	439	13157	242	1411	2530	20985	1319	413	1732
	'31	2989	875	2056	3242	9162	19270	167	19437	5718	866	22782	499	2816	4022	36703	2017	990	3007
	'30	3183	1237	2385	1633	8438	35015	174	35189	6752	824	17843	737	2761	3524	32441	2829	1587	4416
	'29	3845	2222	3548	2258	11873	29891	258	30149	7219	879	20989	1158	3813	6311	40369	7116	2666	9782
New Mexico	'37	335	166	758	1462	2721	2248	89	2337	667	13	3048	37	525	454	4744	291	41	332
	'36	208	82	564	1572	2426	2588	66	2654	464	14	3800	18	346	379	5621	326	51	377
	'35	116	51	404	1191	1762	2422	1	2423	279	5	2583	17	396	400	3680	156	49	205
	'34	105	26	236	913	1280	1865	4	1869	199	3	2261	6	205	201	2875	64	28	92
(Cont.)	'33	63	5	184	536	788	1012	5	1017	102	3	1367	2	74	217	1765	23	1	24

in States from 1929 through 1937

STATES		NASH GROUP			NON-AFFILIATED MANUFACTURERS												TOTALS
		LaFayette	Nash	Totals	§§Auburn	Austin	Continental	Franklin	Graham	Hupp	Packard	Pierce-Arrow	Reo	††Studebaker	‡‡Willys	Misc.	
Michigan (Cont.)	'37	***	3387	3387	27	‡	‡	‡	900	76	5694	1	‡	1802	2455	20	241156
	'36	490	919	1409	103	‡	‡	‡	1195	41	3895	12	447	1680	347	31	226968
	'35	589	513	1102	114	‡	‡	‡	1211	480	2041	10	528	1046	177	8	182604
	'34	308	303	611	155	11	112	3	772	352	263	23	328	1151	96	8	109773
	'33		264	264	123	13	478	7	599	258	443	29	293	1161	405	107	85682
	'32		434	434	308	6		12	829	892	485	94	336	1562	720	254	60186
	'31		822	822	1105	96		13	933	648	664	64	470	1171	1835	1092	96005
	'30		1162	1162	294	203		134	1408	905	1241	111	886	1848	1982	1482	138559
	'29		3096	3096	491			120	4439	3032	2448	197	1278	3582	10429	4934	253810
Minnesota	'37	***	1811	1811	7	‡	‡	‡	267	9	1418	1	‡	1609	898	14	82874
	'36	511	508	1019	44	‡	‡	‡	381	52	1203	6	104	1776	100	132	81773
	'35	336	335	671	84	‡	‡	‡	307	220	643	15	110	1073	18	3	65458
	'34	151	199	350	67	2	17	2	201	246	99	22	109	972	17	3	37573
	'33		179	179	45	8	51	10	185	294	184	19	79	887	264	66	30829
	'32		326	326	133	7		8	292	268	211	22	81	877	705	50	24626
	'31		684	684	421			17	522	564	341	60	161	997	1688	490	46683
	'30		896	896	111	63		20	805	553	549	93	198	1270	2368	764	66790
	'29		1744	1744	323			56	1328	792	642	95	275	1697	5975	2013	89346
Mississippi	'37	***	177	177	1	‡	‡	‡	2		195		‡	92	130	5	22646
	'36	55	70	125		‡	‡	‡	5	2	137			177	26	1	25006
	'35	82	51	133	1	‡	‡	‡	6	17	70			67	14	5	19226
	'34	55	58	113	1	15		1	7	4	3		1	134	12		15904
	'33		45	45	9	70	3	2	2	6	4			82	21	2	10628
	'32		95	95	3	19		1	14	31	10	2		134	60	1	5892
	'31		205	205	7	5		3	38	71	14	3	3	185	104	7	9547
	'30		396	396	3	16		3	98	104	31	8	33	218	173	78	20583
	'29		642	642	1			3	55	220	40	1	67	205	994	140	36864
Missouri	'37	***	1202	1202	14	‡	‡	‡	240		1965	9	‡	1364	909	33	89965
	'36	367	429	796	67	‡	‡	‡	300	48	1489	28	73	1417	27	10	87740
	'35	461	384	845	103	‡	‡	‡	322	142	727	27	68	977	31	3	74915
	'34	238	344	582	131	15	46	10	364	95	151	54	82	1148	89	3	55585
	'33		300	300	105	14	44	34	293	173	209	116	91	853	430	34	45773
	'32		564	564	472	21		31	424	328	226	123	143	901	1049	218	39018
	'31		1029	1029	807			75	611	498	319	176	156	1007	2495	974	60766
	'30		1351	1351	269	112		149	1044	702	570	257	229	1057	3009	1567	86355
	'29		2318	2318	384			238	1427	1124	801	331	339	1732	8219	3479	114025
Montana	'37	***	693	693	7	‡	‡	‡	61	1	419		‡	434	207	5	18062
	'36	245	274	519	16	‡	‡	‡	87	26	252	3	19	554	35		20745
	'35	217	238	455	10	‡	‡	‡	86	66	137	7	24	464	56	2	17405
	'34	76	120	196	4	1	28		45	16	6	10	14	318	4	1	9789
	'33		56	56	9	2	37	7	31	5	10	7	6	172	36	2	6056
	'32		93	93	25	7		8	23	11	7	5	12	116	98	36	4099
	'31		153	153	58			23	34	55	10	6	47	171	254	160	8041
	'30		275	275	46	4		47	89	108	18	12	59	238	443	258	11629
	'29		773	773	109			100	392	159	55	17	107	488	1432	768	21799
Nebraska	'37	***	458	458	7	‡	‡	‡	39	1	486		‡	525	361	4	33640
	'36	186	219	405	24	‡	‡	‡	65	21	363	1	29	703	77	2	37695
	'35	188	173	361	21	‡	‡	‡	76	119	201	1	16	513	30	1	34227
	'34	72	110	182	40			2	80	38	17	4	17	466	27	2	21778
	'33		64	64	43	1	6	2	65	35	40	7	19	381	98	10	16393
	'32		107	107	48	7		4	86	62	32	4	27	341	395	16	11260
	'31		244	244	117			9	166	120	66	7	40	593	987	194	25185
	'30		403	403	65	47		20	275	232	125	10	57	774	1422	376	41345
	'29		1028	1028	76			26	763	314	150	26	96	1026	4600	1275	64664
Nevada	'37	***	222	222	1	‡	‡	‡	40		162		‡	141	59		4767
	'36	93	162	255	3	‡	‡	‡	54	2	133		1	144	26		5255
	'35	35	53	88	7	‡	‡	‡	23	12	78		2	76	23	1	3547
	'34	23	31	54	1		1	1	15	3	4		1	88	18		2457
	'33		3	3	4	1		1	10		6	1	1	38	9	1	1328
	'32		21	21	8			3	16	3	22	1	2	64	12	4	1326
	'31		26	26	45			4	28	16	19	2	5	104	22	31	2393
	'30		71	71	37	11		7	42	26	30	2	4	102	70	88	3463
	'29		117	117	32			17	48	26	57		13	122	113	169	4482
New Hampshire	'37	***	369	369	1	‡	‡	‡	83		422		‡	299	231	5	12961
	'36	99	190	289	11	‡	‡	‡	69	2	249	1	21	270	49	1	12258
	'35	105	108	213	25	‡	‡	‡	74	34	150	2	36	142	32	2	9988
	'34	79	132	211	29	1	1	3	71	22	23	7	41	208	3		7911
	'33		89	89	7	2	14	6	54	19	29	8	34	252	29		6597
	'32		195	195	38	2		18	87	19	39	3	22	253	102	10	5467
	'31		314	314	88			44	92	86	80	16	30	245	306	92	9933
	'30		376	376	68	15		45	114	103	90	26	127	239	289	194	10804
	'29		611	611	60			98	216	113	163	12	104	319	728	533	13577
New Jersey	'37	***	2705	2705	54	‡	‡	‡	572	12	5032	10	‡	2697	1769	11	122103
	'36	304	1118	1422	134	‡	‡	‡	469	56	3732	50	63	2516	225	3	111737
	'35	498	653	1151	238	‡	‡	‡	466	260	1926	42	156	1242	123	8	86049
	'34	354	742	1096	164	4	16	23	324	238	421	123	153	1510	82	12	61061
	'33		561	561	257	48	91	69	348	353	548	208	151	1648	475	150	56438
	'32		1127	1127	532	22		99	575	494	795	298	193	2251	1212	333	48339
	'31		2814	2814	1884			249	810	966	1218	433	350	2670	1972	1422	83097
	'30		3269	3269	914	212		406	1204	1350	2002	583	494	2958	2346	1871	98093
	'29		5872	5872	1292			731	2373	2431	3085	731	674	3949	5459	3295	122065
New Mexico	'37	***	110	110	4	‡	‡	‡	12		214		‡	181	125	1	10781
	'36	20	44	64		‡	‡	‡	5	2	143		5	167	15	2	10881
	'35	31	22	53	10	‡	‡	‡	13	13	55		7	79	11		8311
	'34	14	11	25	11	3	1		1	16	5		6	109	5		6298
	'33		12	12	2					3	11	1	7	80	4	2	3716

(Cont. on Page 24)

Who's Who

(Continued from Previous Page)

cleaners, wreck repair tools, etc. H. C. Lisle, gen. mgr.; L. M. Cheek, sales mgr.; R. G. Pulver, adv. mgr.; G. H. Holmes, engr.; H. S. Lowe, pur. agt.; C. S. Phillips, sales engr. Adv. Agcy.—Holden, Graham & Clark, Donovan bldg., Detroit.

BEARINGS CO. OF AMERICA, Lancaster, Pa. Annular ball bearings, annular contact ball bearings, thrust ball bearings, ball retainers. Jack L. Straub, pres., gen. mgr.; Charles D. Addams, vice-pres., sales mgr.; E. E. Marshall, secy.-treas.; E. H. Hottinger, engr.; John W. Wolf, pur. agt. Det. Rep.—William C. Little, 1012 Ford bldg. Adv. Agcy.—Foltz-Wessinger, Inc., Lancaster, Pa.

BEARINGS INDUSTRY CORP., THE 1834 Broadway, New York, N. Y. Importers and American distributors of BIC ball and roller bearings. S. Fabian Goodman, pres., sales mgr.; Edw. G. Goodman, secy.; M. E. Goodman, treas., pur. agt.

BEARIUM METALS CORP., 258 State st., Rochester, N. Y. Bearing bronze, bushings, oilless bushings, piston pin bushings, high-lead bronze bearings. E. P. Langworthy, pres.; G. P. Palma, vice-pres.

BEAR MFG. CO., 2030 Fifth ave., Rock Island, Ill. Wheel aligners, axle presses, safety testers, front end machines, frame straighteners, wheel straighteners, tire scuff detectors, headlight testers, brake testers, alignment gauges, alignment racks, dynamic and static wheel balancers, tire spreaders, caster shims, wheel balancing weights, steering gear lube, electric files, wheel pullers, wrecking cranes, etc. Will Dammann, pres.; Wm. Walker, vice-pres.; H. W. Dammann, secy.-treas., pur. agt.; E. Quekels, sales mgr.; W. C. Goldschmidt, adv. mgr.; Henry Wochner, engr. Det. Rep.—C. H. Tatham, 92 Moross rd., Grosse Pointe Farms, Mich. Adv. Agcy.—Van Auken-Ragland, Inc., 20 N. Wacker Drive bldg., Chicago, Ill.

BEAURLINE FOUNTAIN BRUSH CO., 1243 S. Wabash ave., Chicago, Ill. Round and oblong fountain brush for washing motorized equipment with refillable heads. A. W. Beaurline, pres.; L. Nyman, sales mgr.

BECK, C. D. & CO., Short Clinton, Sidney, O. Safety coaches. C. D. Beck, gen. mgr.; B. H. Ives, W. Vossler, engr.; R. I. Beck, pur. agt.

BECKER BROS. CARBON CO., 3450 S. 52nd ave., Cicero, Ill. Automotive, generator and starter brushes, carbon clutch bearings, carbon and metal graphite for F.H.P. and industrial motors. Leo Kaufman, pres.; R. E. Fischel, secy.-treas., sales mgr.; M. R. Rosen, gen. mgr.; B. F. Wallace, engr.; A. Koda, pur. agt.

BEHR-MANNING CORP. (Division of Norton Co.), Troy, N. Y. Coated abrasives, metalite cloth sheets and handy rolls, metalite fibre combination discs, cloth bands, cones and belts, Durite paper, Adalox paper. F. E. Gallagher, pres.; H. M. Elliot, vice-pres., gen. sales mgr.; A. J. Sidford, vice-pres.; M. E. Pesnel, secy.; T. S. Green, treas.; L. S. Greenleaf jr., ind. div. sales mgr.; J. M. Cook, jobbing div. sales mgr.; H. T. Greer, adv. mgr.; J. O. Amstuz, engr.; S. A. Barr, pur. agt. Det. Rep.—E. H. Vickers, fcty. branch mgr., 5805 Lincoln ave.

BELDEN MFG. CO., 4647 W. Van Buren st., Chicago, Ill. Automotive wire and cable replacement products. J. C. Belden, pres.; Whipple Jacobs, N. B. Parsons, C. S. Craigmile, vice-pres.; A. Beutler, secy.; A. L. Wanner, treas.; C. S. Craigmile, gen. mgr.; H. W. Clough, sales mgr.; H. H. Wermine, engr. Adv. Agcy.—Fensholt Co., 360 N. Michigan ave., Chicago, Ill.

BELFLEX CORP., THE 2012 Sylvania ave., Toledo, O. Rubberized fabric spring mountings for automobiles and trailers (original equipment), spring mountings for Ford cars (accessory), commercial stampings. W. Barton Eddison, pres.; Harvey W. Bell, vice-pres.; Arthur J. Johnson, secy.-treas.

BELL CO., Inc. THE 401 N. Wolcott ave., Chicago, Ill. Oils, cements, enamels, patch kits, glass cleaner, top dressings, tape. J. M. Bell, pres.; Chas. J. Bell, vice-pres.; M. Belsky, secy.-treas.; Chas. J. Bell, gen. mgr., sales mgr.; Geo. E. Kugelman, pur. agt. Det. Rep.—B. G. Golden, 10 Louise st.

BELL & HOWELL CO., 1801-15 Larchmont ave., Chicago, Ill. 16mm. sound-on-film projectors, 16 mm. and 8 mm. silent motion picture cameras and projectors, 35 mm. motion picture cameras and laboratory equipment. J. H. McNabb, pres., treas.; A. S. Howell, vice-pres.; C. A. Ziebarth, secy.; J. H. Booth, sales mgr.; E. A. Reeve, adv. mgr.; H. R. Cleland, pur. agt. Det. Rep.—C. S. Davis, 2750 Chicago blvd. Adv. Agcy.—Henri, Hurst & McDonald, Inc. 520 N. Michigan ave., Chicago, Ill.

BENDER BODY CO., THE W. 62nd and Barberton ave., Cleveland, O.; trailer and school bus works, 400 Clark st., Elyria, O. Adult city service, suburban service and intercity-interstate service bus and coach bodies, school coach bodies, commercial delivery, Bender Travel Mansion all-steel house car and commercial trailers. Herman Bender, chmn., pres., gen. mgr. and gen. sales mgr.; John Bender, first vice-pres.; Joseph Bender, vice-pres.; Chas. Smith, secy.; Chas. E. Stoops, controller; H. O. DeBoer, school coach, funeral car and ambulance sales mgr.; Ray Naegele, adv. mgr., adult bus and

(Continued on Next Page)

Who's Who

(Continued from Previous Page)

Bruce, sales mgr., adv. mgr.; J. A. Kay, pur. agt.; G. A. Schock, sales mgr., automotive div. **Det. Rep.**—W. M. Hamilton, 22612 Beach st., Dearborn, Mich. **Adv. Agcy.**—O. A. Life, 516 Beaumont st., St. Louis, Mo.

BALDWIN-DUCKWORTH CHAIN CORP., 369 Plainfield st., Springfield, Mass. Duckworth timing chains. G. H. Empsall, pres., gen. mgr.; W. E. Gilbert, vice-pres.; G. D. Gilbert, secy., sales mgr.; F. J. Weschler, treas.; A. T. Arnold, adv. mgr.; J. F. McCann, engr.; E. J. Greene, pur. agt. **Det. Rep.**—K. B. Brandenburg, 2-128 General Motors bldg. **Adv. Agcy.**—Gallen Snow, Inc., 95 State st., Springfield, Mass.

BALDWIN RUBBER CO., 366 S. Boulevard, E., Pontiac, Mich. Rubber goods; molded, extruded and sheet rubber. Samuel C. Clark, pres.; Harry M. Prysale, vice-pres., sales mgr.; E. C. Shephard, secy.-treas.; Angus MacDonald, engr.; E. C. Shephard, pur. agt.

BANTAM BEARINGS CORP., 3702 W. Sample st., South Bend, Ind. Ball bearings, thrust and radial; roller bearings, straight radial roller and straight roller thrust bearings, and tapered roller bearings. F. W. Deming, pres.; A. H. Frauenthal, vice-pres., gen. mgr.; W. T. Bell, secy.-treas.; R. B. Nichols, sales mgr., adv. mgr.; S. R. Thomas, engr.; G. D. Hardy, pur. agt.; J. F. Oehlhoffen, asst. sales mgr. **Det. Rep.**—E. J. Kleist, S. M. Albertson, 707 Stephenson bldg. **Adv. Agcy.**—MacDonald Cook Co., Sherland bldg., South Bend, Ind.

BANTAM TRAILER SALES CO., P. O. box 227, Butler Pa. Utility trailer and tow bars for Bantam cars; trailers, towing bars and hooks. W. L. Hall, sales mgr.; E. L. Walter, secy.

BARBER-COLMAN CO., River and Loomis st., Rockford, Ill. Automatic spoolers, warpers, hobs, reamers, sharpeners, etc. H. D. Colman, pres.; H. A. Severson, vice-pres., gen. mgr.; R. J. Miller, secy.-treas.; R. A. Horner, sales mgr.; E. V. Eastman, adv. mgr.; S. M. Ransome, engr.; H. W. Bails, pur. agt. **Det. Rep.**—Hodges Machy. Co., 101 E. Baltimore ave. **Adv. Agcy.**—C. A. Corrigan, 825 N. Main st., Rockford, Ill.

BARGMAN, THEODORE, 5200 Loraine ave., Detroit, Mich. Trailer hardware and equipment, hitches, lifting devices, pumps, sinks, lighting fixtures, locking door handles, lamps. Theo. Bargman, gen. mgr., sales mgr.; J. G. Gottschalk, adv. mgr., pur. agt.; Leroy Hollenbeck, engr.

BARNES DRILL CO., 814 Chestnut st., Rockford, Ill. Metal working self-oiling all geared drilling and tapping machines, honing machines. J. E. Andress, chmn.; A. M. Johnson, pres.; W. M. Fairbairn, vice-pres., works mgr.; Reed M. Andress, vice-pres., foreign mgr.; A. G. Block, secy.-treas.; Ronald S. Walker, sales mgr.; Galen E. Andrews, pur. agt. **Det. Rep.**—English & Miller Mchy. Co., 6560 Epworth blvd. **Adv. Agcy.**—C. A. Corrigan, 825 N. Main st., Rockford, Ill.

BARNES-GIBSON-RAYMOND Division of Associated Spring Corp., 6400 Miller ave., Detroit, Mich. Springs, valve, clutch, all mechanical types. L. D. Adams, gen. mgr.; W. J. Black, sales mgr.; F. P. Zimmerli, chief engr.; L. E. Hilts, pur. agt.

BARRETT-CRAVENS CO., 3255 W. 30th st., Chicago, Ill. Hand lift-trucks, lift-truck platforms, portable elevators, structural steel storage racks, drain racks, floor trucks. A. M. Barrett, pres.; E. J. Heimer, vice-pres., sales mgr., adv. mgr.; O. M. Lund, secy., engr.; J. F. Lamey, treas.; G. Collinet, pur. agt. **Det. Rep.**—E. C. White, 812 Donovan bldg.

BARR RUBBER PRODS. CO., THE Sandusky, O. Mechanical and industrial rubber, sponge rubber. **Det. Rep.**—A. L. Moses Co., 637 New Center bldg.

BASSICK CO., THE 38 Austin st., Bridgeport, Conn. Hood fasteners, hood hinges, trunk locks, starter pedals, door dovetails, robe cord and assist strap fixtures, truck casters. W. A. Rose, pres., gen. mgr.; T. T. Logie, W. G. Reycroft, W. F. Herold, vice-pres.; J. T. Foerth, asst. secy., asst. treas.; J. W. Storrs, sales mgr. auto hdw. div.; R. D. Mount, adv. mgr.; T. T. Logie, engr.; M. L. Greenstein, pur. agt. **Det. Rep.**—H. V. Rohm, 3-140 General Motor bldg.

FASTIAN-BLESSING CO., THE 240 E. Ontario st., Chicago, Ill. RegO welding and cutting equipment, valves, regulators, economizer. L. G. Blessing, pres.; E. N. Krein, E. L. Mills, vice-pres.; A. C. Krein, secy.-treas; M. E. Steczynski, adv. mgr.; W. C. Buttner, engr.; A. L. Augur, pur. agt. **Det. Rep.**—H. A. Goodwin (dist. mgr.), 240 E. Ontario st., Chicago; National Cylinder Gas Co., distributor, 7332 Oakland ave., Detroit. **Adv. Agcy.**—L. W. Ramsey Co., 230 N. Michigan ave., Chicago, Ill.

BATES LUDINGTON CO., W. Filer st., Ludington, Mich. Replacement cylinder heads. K. L. Ashbacker, pres., gen. mgr., sales mgr.; J. Sniegowski, vice-pres.; A. H. Burch, secy.-treas.; S. Meers, pur. agt.

BEALL TOOL DIVISION, Hubbard & Co., East Alton, Ill. Lock washers. C. L. Peirce jr., pres.; E. Wessell, vice-pres. in chge. **Det. Rep.**—Sidney Norwood, 11-253 General Motors bldg.

BEAN, JOHN MFG. CO., Lansing, Mich. Automotive service station equipment, car washers, wheel aligners, brake testers, headlight testers, welders, vacuum

(Continued on Next Page)

New Passenger Car Registrations By Makes

Figures in this table by R. L. Polk & Co., New Jersey Motor List Co. and Sherlock & Arnold

STATES		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP							HUDSON GR'P		
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	*Buick	Cadillac	Chevrolet	LaSalle	**Oldsmobile	†Pontiac	Totals	§Terraplane	Hudson	Totals
Michigan	'37	4163	4137	15206	27443	50949	72023	1807	73830	14936	482	49038	1787	11802	16373	94418	6429	1168	7597
(Cont.)	'36	2677	2055	16720	25919	47371	66496	1358	67854	11574	636	56737	931	10929	12534	93341	7591	1651	9242
	'35	1767	1110	10335	18484	31696	72074	229	72303	5635	389	36164	921	9998	11849	64956	5125	1807	6932
	'34	1089	549	4511	13053	19202	43160	139	43299	3724	330	25319	405	4527	4220	38525	3331	1531	4862
	'33	1125	824	6235	10936	19120	26468	120	26588	1781	192	22253	185	2299	5431	32141	3463	190	3653
	'32	1122	1541	1350	5408	9421	20515	228	20743	2030	405	14222	208	1688	2337	20890	2440	760	3200
	'31	2090	1340	2823	6178	12431	29683	199	29882	4422	667	26397	284	3610	4795	40175	3241	1363	4604
	'30	1810	1291	2280	3165	8546	68916	188	69104	5915	862	27623	583	3478	4507	42968	4170	2115	6285
	'29	3733	3839	5407	5066	18045	91832	348	92180	12239	917	47621	1346	8029	13508	83660	20163	5716	25879
Minnesota	'37	1993	1747	4955	11204	19899	22459	493	22952	3693	113	20148	324	3241	4600	32119	1609	261	1870
	'36	1316	1003	4445	12833	19597	18686	265	18951	2927	116	25821	153	3150	3873	36040	1987	381	2368
	'35	922	463	3072	9840	14297	21046	26	21072	1704	59	17072	131	2922	3203	25091	1460	394	1854
	'34	566	146	1112	5874	7698	10705	31	10736	1020	44	12639	51	1229	1029	16012	731	289	1020
	'33	516	272	1173	5274	7235	6730	35	6765	797	49	10863	53	705	1548	14014	494	50	544
	'32	591	294	450	2532	3867	5785	58	5843	789	62	8536	53	682	1197	11319	420	197	617
	'31	1267	380	953	3089	5689	11666	45	11711	1509	115	16839	79	1275	2277	22094	789	455	1244
	'30	1459	443	1037	2601	5540	27971	56	28027	1849	104	17914	173	1062	2700	23802	1154	577	1731
	'29	1416	748	1829	2956	6949	35788	86	35874	2432	102	17193	224	1871	5358	27180	3385	1018	4403
Mississippi	'37	271	197	955	2905	4328	7021	116	7137	892	12	7928	61	561	820	10274	283	22	305
	'36	178	85	1031	3478	4772	6783	80	6863	576	6	10860	31	442	614	12529	328	41	369
	'35	143	56	588	2071	2858	6816	4	6820	290	6	7759	18	339	604	9016	175	44	219
	'34	121	27	416	2267	2831	4937	3	4940	233	6	6848	9	192	405	7693	123	26	149
	'33	98	33	243	1271	1645	2852	5	2857	101	6	5274	3	50	378	5812	65	3	68
	'32	52	35	63	220	370	1833	8	1841	99	1	3053	2	42	91	3288	19	4	23
	'31	168	41	134	200	543	3572	5	3577	205	3	4271	6	43	188	4716	43	23	66
	'30	428	203	331	185	1147	9851	17	9868	662	16	7200	20	78	249	8225	117	65	182
	'29	652	399	793	522	2366	18699	18	18717	943	21	11064	35	164	613	12840	396	177	573
Missouri	'37	1618	1980	5812	12813	22223	20137	621	20758	4237	204	25331	588	4546	4778	39684	1294	270	1564
	'36	1126	921	5514	12264	19825	18967	296	19263	3040	221	30568	305	4304	4339	42777	1280	340	1620
	'35	901	626	4034	10463	16024	23526	56	23582	1761	127	21100	293	4120	3472	30873	872	319	1191
	'34	597	416	2454	9544	13011	14957	60	15017	1297	119	17660	129	2342	2215	23762	694	331	1025
	'33	712	790	2774	8999	13275	7850	65	7915	1003	72	16431	100	1107	2440	21153	665	69	734
	'32	666	1086	1070	4098	6920	8543	97	8640	1324	128	13956	97	883	1661	18049	719	190	909
	'31	1064	646	1649	2776	6135	16218	88	16306	2164	192	22191	146	1358	2748	28799	1024	355	1379
	'30	1247	738	1877	2018	5880	34351	102	34453	2897	231	24924	279	1867	2954	33152	1934	620	2554
	'29	1488	1066	3429	2134	8117	39640	153	39793	4056	280	26537	455	2971	5298	39597	5004	1122	6126
Montana	'37	623	271	1023	2208	4125	3915	191	4105	687	12	4735	64	859	696	7253	550	201	751
	'36	508	202	1429	2871	5010	4688	133	4821	598	16	6040	36	793	562	8045	1037	321	1358
	'35	361	104	1089	2683	4237	4873	3	4876	246	5	4460	37	636	667	6051	677	257	934
	'34	170	65	550	1631	2416	2577	3	2580	195	3	2897	10	281	368	3754	284	112	396
	'33	122	59	353	998	1532	1248	3	1251	185	6	1947	5	173	416	2732	146	15	161
	'32	86	70	87	353	596	1014	2	1016	174	6	1411	2	60	276	1929	74	43	117
	'31	258	139	216	369	982	2311	3	2314	337	10	2595	15	133	420	3510	155	109	264
	'30	255	190	315	360	1120	4265	6	4271	365	17	3237	25	142	419	4205	275	161	436
	'29	458	305	878	874	2515	6599	7	6606	803	27	4716	30	402	1049	7027	928	323	1251
Nebraska	'37	699	447	1564	4267	6977	9173	251	9424	1532	28	9936	107	1394	1722	14719	531	108	639
	'36	531	260	1946	5581	8318	9423	157	9580	1292	24	13019	42	1438	1531	17346	619	142	761
	'35	375	223	1676	4986	7260	11713	13	11726	763	19	9204	49	1583	1616	13234	464	204	668
	'34	210	128	659	3213	4210	6921	14	6935	422	17	7088	17	813	809	9166	427	165	592
	'33	155	92	566	2796	3609	3770	7	3777	289	13	6464	10	376	816	7968	254	14	268
	'32	172	60	206	721	1159	3433	20	3453	344	19	4143	18	231	557	5312	141	66	207
	'31	440	113	536	1200	2289	8136	21	8157	785	28	9641	14	458	893	11819	260	127	377
	'30	718	212	1028	1430	3388	17566	38	17604	1305	32	12754	30	717	1063	15901	432	164	646
	'29	888	567	1900	1846	5201	26020	50	26070	2325	55	15541	66	1277	3058	22322	1324	367	1691
Nevada	'37	183	150	310	623	1266	713	75	788	353	26	997	90	207	272	1945	100	43	143
	'36	108	112	389	754	1363	1039	51	1090	221	42	1151	40	255	283	1992	119	73	192
	'35	53	42	266	522	883	983	4	987	86	20	705	38	231	204	1284	44	39	83
	'34	33	16	141	365	555	669	1	670	76	9	665	10	120	93	973	37	36	73
	'33	21	27	49	216	313	316	1	317	55	4	431	8	34	87	619	3	1	4
	'32	50	28	35	121	234	310	7	317	115	12	394	7	24	47	599	5	15	20
	'31	143	40	74	103	360	726	8	734	117	13	680	13	34	56	913	50	34	84
	'30	161	90	168	111	530	1174	5	1179	226	7	664	19	78	62	1056	113	95	208
	'29	184	92	283	88	647	1294	8	1302	369	29	788	36	114	123	1459	208	152	360
New Hampshire	'37	280	197	904	1646	3027	2484	89	2573	798	32	2890	102	928	808	5558	318	75	393
	'36	172	103	822	1659	2756	2596	60	2656	730	48	3134	33	911	634	5490	282	112	394
	'35	123	52	624	1263	2062	2740	5	2745	398	23	2507	41	651	477	4097	259	115	374
	'34	81	42	351	953	1427	2108	14	2122	357	13	2255	11	321	294	3251	360	131	491
	'33	113	83	266	854	1316	1545	6	1551	211	10	2051	7	182	393	2854	327	6	333
	'32	107	111	89	656	963	1292	16	1308	272	11	1443	10	127	308	2171	193	44	237
	'31	207	103	188	560	1058	2862	19	2881	452	36	2692	30	346	578	4134	331	136	467
	'30	296	193	205	295	989	4023	13	4036	588	46	2315	28	249	375	3601	355	137	492
	'29	340	321	354	341	1356	3773	9	3779	676	32	2579	56	368	681	4392	851	242	1093
New Jersey	'37	3822	3253	11227	15238	33540	20077	861	20938	10300	674	21558	1513	7612	10190	51847	2285	631	2916
	'36	2393	1621	9914	16711	30639	18978	604	19582	8053	695	25229	721	7539	8115	50352	1846	648	2494
	'35	1433	977	6814	11116	20340	23330	104	23434	4375	408	17642	638	5923	5835	34821	1203	639	1842
	'34	992	392	3638	8736	13758	15212	93	15305	3454	279	15495	221	2812	3675	25936	1172	724	1896
	'33	1370	894	3345	8095	13704	9874	101	9975	2614	243	16065	245	1841	5455	26463	1269	120	1389
	'32	1393	1072	1137	5451	9053	8488	150	8638	3206	439	13157	242	1411	2530	20985	1319	413	1732
	'31	2989	875	2056	3242	9162	19270	167	19437	5718	866	22782	499	2816	4022	36703	2017	990	3007
	'30	3183	1237	2385	1633	8438	35015	174	35189	6752	824	17843	737	2761	3524	32441	2829	1587	4416
	'29	3845	2222	3548	2258	11873	29891	258	30149	7219	879	20989	1158	3813	6311	40369	7116	2666	9782
New Mexico	'37	335	166	758	1462	2721	2248	89	2337	667	13	3048	37	525	454	4744	291	41	332
	'36	208	82	564	1572	2426	2588	66	2654	464	14	3800	18	346	379	5621	326	51	377
	'35	116	51	404	1191	1762	2422	1	2423	279	5	2583	17	396	400	3680	156	49	205
	'34	105	26	236	913	1280	1865	4	1869	199	3	2261	6	205	201	2875	64	28	92
(Cont.)	'33	63	5	184	536	788	1012	5	1017	102	3	1367	2	74	217	1765	23	1	24

in States from 1929 through 1937

STATES		NASH GROUP			NON-AFFILIATED MANUFACTURERS												TOTALS
		LaFayette	Nash	Totals	§§Auburn	Austin	Continental	Franklin	Graham	Hupp	Packard	Pierce-Arrow	Reo	††Studebaker	‡‡Willys	Misc.	
Michigan (Cont.)	'37	***	3387	3387	27	‡	‡	‡	900	76	5694	1	‡	1802	2455	20	241156
	'36	490	919	1409	103	‡	‡	‡	1195	41	3895	12	447	1680	347	31	226968
	'35	589	513	1102	114	‡	‡	‡	1211	480	2041	10	528	1046	177	8	182604
	'34	308	303	611	155	11	112	3	772	352	263	23	328	1151	96	8	109773
	'33		264	264	123	13	478	7	599	258	443	29	293	1161	405	107	85682
	'32		434	434	308	6		12	829	892	485	94	336	1562	720	254	60186
	'31		822	822	1105	96		13	933	648	664	64	470	1171	1835	1092	96005
	'30		1162	1162	294	203		134	1408	905	1241	111	886	1848	1982	1482	138559
	'29		3096	3096	491			120	4439	3032	2448	197	1278	3582	10429	4934	253810
Minnesota	'37	***	1811	1811	7	‡	‡	‡	267	9	1418	1	‡	1609	898	14	82874
	'36	511	508	1019	44	‡	‡	‡	381	52	1203	6	104	1776	100	132	81773
	'35	336	335	671	84	‡	‡	‡	307	220	643	15	110	1073	18	3	65458
	'34	151	199	350	67	2	17	2	201	246	99	22	109	972	17	3	37573
	'33		179	179	45	8	51	10	185	294	184	19	79	887	264	66	30829
	'32		326	326	133	7		8	292	268	211	22	81	877	705	50	24626
	'31		684	684	421			17	522	564	341	60	161	997	1688	490	46683
	'30		896	896	111	63		20	805	553	549	93	198	1270	2368	764	66790
	'29		1744	1744	323			56	1328	792	642	95	275	1697	5975	2013	89346
Mississippi	'37	***	177	177	1	‡	‡	‡	2		195		‡	92	130	5	22646
	'36	55	70	125		‡	‡	‡	5	2	137			177	26	1	25006
	'35	82	51	133	1	‡	‡	‡	6	17	70			67	14	5	19226
	'34	55	58	113	1	15		1	7	4	3		1	134	12		15904
	'33		45	45	9	70	3	2	2	6	4			82	21	2	10628
	'32		95	95	3	19		1	14	31	10	2		134	60	1	5892
	'31		205	205	7	5		3	38	71	14	3	3	185	104	7	9547
	'30		396	396	3	16		3	98	104	31	8	33	218	173	78	20583
	'29		642	642	1			3	55	220	40	1	67	205	994	140	36864
Missouri	'37	***	1202	1202	14	‡	‡	‡	240		1965	9	‡	1364	909	33	89965
	'36	367	429	796	67	‡	‡	‡	300	48	1489	28	73	1417	27	10	87740
	'35	461	384	845	103	‡	‡	‡	322	142	727	27	68	977	31	3	74915
	'34	238	344	582	131	15	46	10	364	95	151	54	82	1148	89	3	55585
	'33		300	300	105	14	44	34	293	173	209	116	91	853	430	34	45773
	'32		564	564	472	21		31	424	328	226	123	143	901	1049	218	39018
	'31		1029	1029	807			75	611	498	319	176	156	1007	2495	974	60766
	'30		1351	1351	269	112		149	1044	702	570	257	229	1057	3009	1567	86355
	'29		2318	2318	384			238	1427	1124	801	331	339	1732	8219	3479	114025
Montana	'37	***	693	693	7	‡	‡	‡	61	1	419		‡	434	207	5	18062
	'36	245	274	519	16	‡	‡	‡	87	26	252	3	19	554	35		20745
	'35	217	238	455	10	‡	‡	‡	86	66	137	7	24	464	56	2	17405
	'34	76	120	196	4	1	28		45	16	6	10	14	318	4	1	9789
	'33		56	56	9	2	37	7	31	5	10	7	6	172	36	2	6056
	'32		93	93	25	7		8	23	11	7	5	12	116	98	36	4099
	'31		153	153	58			23	34	55	10	6	47	171	254	160	8041
	'30		275	275	46	4		47	89	108	18	12	59	238	443	258	11629
	'29		773	773	109			100	392	159	55	17	107	488	1432	768	21799
Nebraska	'37	***	458	458	7	‡	‡	‡	39	1	486		‡	525	361	4	33640
	'36	186	219	405	24	‡	‡	‡	65	21	363	1	29	703	77	2	37695
	'35	188	173	361	21	‡	‡	‡	76	119	201	1	16	513	30	1	34227
	'34	72	110	182	40			2	80	38	17	4	17	466	27	2	21778
	'33		64	64	43	1	6	2	65	35	40	7	19	381	98	10	16393
	'32		107	107	48	7		4	86	62	32	4	27	341	395	16	11260
	'31		244	244	117			9	166	120	66	7	40	593	987	194	25185
	'30		403	403	65	47		20	275	232	125	10	57	774	1422	376	41345
	'29		1028	1028	76			26	763	314	150	26	96	1026	4600	1275	64664
Nevada	'37	***	222	222	1	‡	‡	‡	40		162		‡	141	59		4767
	'36	93	162	255	3	‡	‡	‡	54	2	133		1	144	26		5255
	'35	35	53	88	7	‡	‡	‡	23	12	78		2	76	23	1	3547
	'34	23	31	54	1		1	1	15	3	4		1	88	18		2457
	'33		3	3	4	1		1	10		6	1	1	38	9	1	1328
	'32		21	21	8			3	16	3	22	1	2	64	12	4	1326
	'31		26	26	45			4	28	16	19	2	5	104	22	31	2393
	'30		71	71	37	11		7	42	26	30	2	4	102	70	88	3463
	'29		117	117	32			17	48	26	57		13	122	113	169	4482
New Hampshire	'37	***	369	369	1	‡	‡	‡	83		422		‡	299	231	5	12961
	'36	99	190	289	11	‡	‡	‡	69	2	249	1	21	270	49	1	12258
	'35	105	108	213	25	‡	‡	‡	74	34	150	2	36	142	32	2	9988
	'34	79	132	211	29	1	1	3	71	22	23	7	41	208	3		7911
	'33		89	89	7	2	14	6	54	19	29	8	34	252	29		6597
	'32		195	195	38	2		18	87	19	39	3	22	253	102	10	5467
	'31		314	314	88			44	92	86	80	16	30	245	306	92	9933
	'30		376	376	68	15		45	114	103	90	26	127	239	289	194	10804
	'29		611	611	60			98	216	113	163	12	104	319	728	533	13577
New Jersey	'37	***	2705	2705	54	‡	‡	‡	572	12	5032	10	‡	2697	1769	11	122103
	'36	304	1118	1422	134	‡	‡	‡	469	56	3732	50	63	2516	225	3	111737
	'35	498	653	1151	238	‡	‡	‡	466	260	1926	42	156	1242	123	8	86049
	'34	354	742	1096	164	4	16	23	324	238	421	123	153	1510	82	12	61061
	'33		561	561	257	48	91	69	348	353	548	208	151	1648	475	150	56438
	'32		1127	1127	532	22		99	575	494	795	298	193	2251	1212	333	48339
	'31		2814	2814	1884			249	810	966	1218	433	350	2670	1972	1422	83097
	'30		3269	3269	914	212		406	1204	1350	2002	583	494	2958	2346	1871	98093
	'29		5872	5872	1292			731	2373	2431	3085	731	674	3949	5459	3295	122065
New Mexico	'37	***	110	110	4	‡	‡	‡	12		214		‡	181	125	1	10781
	'36	20	44	64		‡	‡	‡	5	2	143		5	167	15	2	10881
	'35	31	22	53	10	‡	‡	‡	13	13	55		7	79	11		8311
	'34	14	11	25	11	3	1		1	16	5		6	109	5		6298
	'33		12	12	2					3	11	1	7	80	4	2	3716

(Cont. on Page 24)

Who's Who

(Continued from Previous Page)

cleaners, wreck repair tools, etc. H. C. Lisle, gen. mgr.; L. M. Cheek, sales mgr.; R. G. Pulver, adv. mgr.; G. H. Holmes, engr.; H. S. Lowe, pur. agt.; C. S. Phillips, sales engr. Adv. Agcy.—Holden, Graham & Clark, Donovan bldg., Detroit.

BEARINGS CO. OF AMERICA, Lancaster, Pa. Annular ball bearings, annular contact ball bearings, thrust ball bearings, ball retainers. Jack L. Straub, pres., gen. mgr.; Charles D. Addams, vice-pres., sales mgr.; E. E. Marshall, secy.-treas.; E. H. Hottinger, engr.; John W. Wolf, pur. agt. Det. Rep.—William C. Little, 1012 Ford bldg. Adv. Agcy.—Foltz-Wessinger, Inc., Lancaster, Pa.

BEARINGS INDUSTRY CORP., THE 1834 Broadway, New York, N. Y. Importers and American distributors of BIC ball and roller bearings. S. Fabian Goodman, pres., sales mgr.; Edw. G. Goodman, secy.; M. E. Goodman, treas., pur. agt.

BEARIUM METALS CORP., 258 State st., Rochester, N. Y. Bearing bronze, bushings, oilless bushings, piston pin bushings, high-lead bronze bearings. E. P. Langworthy, pres.; G. P. Palma, vice-pres.

BEAR MFG. CO., 2030 Fifth ave., Rock Island, Ill. Wheel aligners, axle presses, safety testers, front end machines, frame straighteners, wheel straighteners, tire scuff detectors, headlight testers, brake testers, alignment gauges, alignment racks, dynamic and static wheel balancers, tire spreaders, caster shims, wheel balancing weights, steering gear lube, electric files, wheel pullers, wrecking cranes, etc. Will Dammann, pres.; Wm. Walker, vice-pres.; H. W. Dammann, secy.-treas., pur. agt.; E. Quekels, sales mgr.; W. C. Goldschmidt, adv. mgr.; Henry Wochner, engr. Det. Rep.—C. H. Tatham, 92 Moross rd., Grosse Pointe Farms, Mich. Adv. Agcy.—Van Auken-Ragland, Inc., 20 N. Wacker Drive bldg., Chicago, Ill.

BEAURLINE FOUNTAIN BRUSH CO., 1243 S. Wabash ave., Chicago, Ill. Round and oblong fountain brush for washing motorized equipment with refillable heads. A. W. Beaurline, pres.; L. Nyman, sales mgr.

BECK, C. D. & CO., Short Clinton, Sidney, O. Safety coaches. C. D. Beck, gen. mgr.; B. H. Ives, W. Vossler, engr.; R. I. Beck, pur. agt.

BECKER BROS. CARBON CO., 3450 S. 52nd ave., Cicero, Ill. Automotive, generator and starter brushes, carbon clutch bearings, carbon and metal graphite for F.H.P. and industrial motors. Leo Kaufman, pres.; R. E. Fischel, secy.-treas., sales mgr.; M. R. Rosen, gen. mgr.; B. F. Wallace, engr.; A. Koda, pur. agt.

BEHR-MANNING CORP. (Division of Norton Co.), Troy, N. Y. Coated abrasives, metalite cloth sheets and handy rolls, metalite fibre combination discs, cloth bands, cones and belts, Durite paper, Adalox paper. F. E. Gallagher, pres.; H. M. Elliot, vice-pres., gen. sales mgr.; A. J. Sidford, vice-pres.; M. E. Pesnel, secy.; T. S. Green, treas.; L. S. Greenleaf jr., ind. div. sales mgr.; J. M. Cook, jobbing div. sales mgr.; H. T. Greer, adv. mgr.; J. O. Amstuz, engr.; S. A. Barr, pur. agt. Det. Rep.—E. H. Vickers, fcty. branch mgr., 5805 Lincoln ave.

BELDEN MFG. CO., 4647 W. Van Buren st., Chicago, Ill. Automotive wire and cable replacement products. J. C. Belden, pres.; Whipple Jacobs, N. B. Parsons, C. S. Craigmile, vice-pres.; A. Beutler, secy.; A. L. Wanner, treas.; C. S. Craigmile, gen. mgr.; H. W. Clough, sales mgr.; H. H. Wermine, engr. Adv. Agcy.—Fensholt Co., 360 N. Michigan ave., Chicago, Ill.

BELFLEX CORP., THE 2012 Sylvania ave., Toledo, O. Rubberized fabric spring mountings for automobiles and trailers (original equipment), spring mountings for Ford cars (accessory), commercial stampings. W. Barton Eddison, pres.; Harvey W. Bell, vice-pres.; Arthur J. Johnson, secy.-treas.

BELL CO., Inc. THE 401 N. Wolcott ave., Chicago, Ill. Oils, cements, enamels, patch kits, glass cleaner, top dressings, tape. J. M. Bell, pres.; Chas. J. Bell, vice-pres.; M. Belsky, secy.-treas.; Chas. J. Bell, gen. mgr., sales mgr.; Geo. E. Kugelman, pur. agt. Det. Rep.—B. G. Golden, 10 Louise st.

BELL & HOWELL CO., 1801-15 Larchmont ave., Chicago, Ill. 16mm. sound-on-film projectors, 16 mm. and 8 mm. silent motion picture cameras and projectors, 35 mm. motion picture cameras and laboratory equipment. J. H. McNabb, pres., treas.; A. S. Howell, vice-pres.; C. A. Ziebarth, secy.; J. H. Booth, sales mgr.; E. A. Reeve, adv. mgr.; H. R. Cleland, pur. agt. Det. Rep.—C. S. Davis, 2750 Chicago blvd. Adv. Agcy.—Henri, Hurst & McDonald, Inc. 520 N. Michigan ave., Chicago, Ill.

BENDER BODY CO., THE W. 62nd and Barberton ave., Cleveland, O.; trailer and school bus works, 400 Clark st., Elyria, O. Adult city service, suburban service and intercity-interstate service bus and coach bodies, school coach bodies, commercial delivery, Bender Travel Mansion all-steel house car and commercial trailers. Herman Bender, chmn., pres., gen. mgr. and gen. sales mgr.; John Bender, first vice-pres.; Joseph Bender, vice-pres.; Chas. Smith, secy.; Chas. E. Stoops, controller; H. O. DeBoer, school coach, funeral car and ambulance sales mgr.; Ray Naegele, adv. mgr., adult bus and

(Continued on Next Page)

Who's Who

(Continued from Previous Page)

coml. sales mgr.; Jos. Hahn, engr.; Jos. Pimsner, pur. agt.; Ray Naegele, asst. to pres. **Adv. Agcy.**—The Bayless-Kerr Co., Hanna bldg., Cleveland.

BENDIX AVIATION CORP., South Bend, Ind. and New York City. Vincent Bendix, pres.; E. R. Palmer, vice-pres., treas.; Charles Marcus, vice-pres. in chge. of aviation div.; D. O. Thomas, vice-pres. in chge of automotive div.; W. L. McGrath, vice-pres., gen. mgr. of Eclipse Machine div.; V. W. Kliesrath, vice-pres. in chge. of marine div.; H. A. Gossner, secy.; W. H. Houghton, comptr.; H. L. Sharlock, dir. of public rel.

BENDIX-ECLIPSE OF CANADA, Ltd., Argyle rd., Windsor, Ont., Can. Bendix drives, hydrallic master and wheel cylinders, brake cables, brakes. Richard W. Keeley, pres.; W. L. McGrath, vice-pres.; H. A. Gossner, secy.; E. R. Palmer, treas.; Richard W. Keeley, gen. mgr.; E. C. Maunder, sales mgr., adv. mgr.; J. C. Blonde, engr.; H. A. Cole, pur. agt. **Det. Rep.**—R. W. Keeley, 8-205 General Motors bldg. **Adv. Agcy.**—Roche, Williams & Cunnyngham, 310 S. Michigan ave., Chicago, Ill.

BENDIX PRODUCTS DIV., Bendix Aviation Corp., 401 Bendix Drive, South Bend,, Ind. Brakes, mechanical and hydraulic; B-K vacuum power brakes, Finger tip gear shifting, automatic clutch control, hydraulic throttle control, vacuum door control, vacuum pump, hydraulic steering stabilizer, brake linings, replacement shoes, carburetors, rolling ball universal joints, anti-skid tire treatment equipment, Bendix-Cowdrey brake testers, Bendix-Feragen testing, inspection and corrective servicing equipment, universal camber, caster and king pin gauges, decelerometers. Vincent Bendix, chmn.; M. P. Ferguson, gen. mgr.; Frank B. Willis, dir. of sales; C. W. Butterfield, adv. mgr.; C. E. Budd, pur. agt.; F. H. Wells, exec. engr.; J. W. White, chge. of brake engr.; D. L. Gallup, engr., brakes; W. B. Paine, chief engr., B-K power brakes; F. C. Mock, chge. carburetor engr.; E. O. Wirth, engr., carburetors. **Det. Rep.**—A. C. Chambers, sales mgr., brakes; R. C. Allan, sales mgr., carburetors, 8205 General Motors bldg. **Adv. Agcy.**—Roche, Williams & Cunnyngham, 310 S. Michigan, Chicago, Ill.

BENDIX - WESTINGHOUSE AUTOMOTIVE AIR BRAKE CO., 5001 Centre ave., Pittsburgh, Pa. Air brakes, air sanders, air clutch control, alcohol evaporators, air gearshift, air horns. Vincent Bendix, pres.; S. G. Down, exec. vice-pres., H. A. Gossner, secy.; M. E. Smith, asst. secy.-treas.; S. C. McConahey, asst. treas.; R. O. Yearick, asst. secy. R. L. Morrison, gen. mgr.; C. A. Ohl, dir. of sales and engr.; F. L. Hall, sales mgr.; D. W. Scott, adv. mgr.; E. R. Fitch, chief engr.; H. L. Westring, acting pur. agt.; W. H. Houghton, comptr.; W. C. Landis, works mgr.; D. H. Robinson, serv. mgr. **Det. Rep.**—A. V. Howe, District mgr., 8-212 General Motors bldg. **Adv. Agcy.**—Pitt Advertising Co., 204 Westinghouse bldg., Pittsburgh, Pa.

BERGER MFG. DIVISION, Republic Steel Corp., 1038 Belden ave., N. E., Canton, O. Automotive bins, display tables, cabinets, shelving, lockers. W. C. Gubbins, div. auditor; L. S. Hamaker, gen. mgr.; J. W. Strong, sales mgr.; N. W. Sutmaier, adv. mgr.; Paul Vignos, engr.; Karl Foltz, pur. agt. **Det Rep.**—J. F. Skillman, Berger Mfg. Div., Republic Steel Corp., 224 Stormfeltz Loveley bldg. **Adv. Agcy.**—G. M. Basford Co., Leader bldg., Cleveland, O.

BERGMAN TOOL MFG. CO., 1573-75 Niagara, Buffalo, N. Y. Battery service tools, wrenches, tinners' strips, combination pliers. J. E. Bergman, gen. mgr.; R. W. Kempner, sales mgr. **Det. Rep.**—Mark L. Berman, 2722 Webb ave.

BIEDERMAN MOTORS CORP., 2131 Spring Grove ave., Cincinnati, O. Motor trucks, tractors, trailers, buses. Charles Biederman, chmn., pres.; Louis D. Henley, vice-pres., sales mgr.; Fred W. Biederman, secy., adv. mgr., engr.; William Henley, treas.

BIJUR LUBRICATING CORP., 43-01 Twenty-Second st., Long Island City, N. Y. Central chassis lubricating systems, automatic industrial lubricating equipment, oil for chassis lubrication. E. H. Kocher, pres., gen. mgr.; T. R. Thomas, sales mgr.; F. M. Hewitt, engr. (Detroit); W. Knoll, pur. agt. **Det. Rep.**—F. M. Hewitt, 2-266 General Motors bldg. **Adv. Agcy.**—G. E. Hatch, 10 E. 40th st., New York City.

BINKS MFG. CO., 3114-40 Carroll ave., Chicago, Ill. Spray painting and finishing equipment, spray guns, spray booths, material containers, exhaust fans, compressors, hose and connections, accessories. J. F. Roche, pres.; S. Bramsen, J. F. Roche jr., vice-pres.; J. C. Johnson, secy.-treas.; J. F. Roche jr., ind. sales mgr.; W. B. Crawford, jobber sales mgr.; E. F. Watts, adv. mgr.; S. Bramsen, engr.; J. J. Marantic, pur. agt. **Det. Rep.**—A. W. Christenson, 2830 E. Grand blvd. **Adv. Agcy.**—C. M. Mirsbach, 230 W. Superior st., Chicago, Ill.

BIRDSEYE ELEC. CORP., 100 E. 42nd st., New York, N. Y. Clarence Birdseye, pres.; Frank R. Goodell, vice-pres.; W. R. Freeman, sales mgr.; R. W. Waddy, adv. mgr.; B. McRonald, engr. **Det. Rep.**—Central Distr. Co., 944 Harper ave. **Adv. Agcy.**—Anderson, Davis & Platt, 1270 6th ave., New York City.

(Continued on Next Page)

New Passenger Car Registrations By Makes

STATES		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP							HUDSON GR'P		
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	*Buick	Cadillac	Chevrolet	LaSalle	**Oldsmobile	†Pontiac	Totals	§Terraplane	Hudson	Totals
N. Mex. (Cont.)	'32	35	14	66	166	281	794	1	795	150	9	852	3	23	75	1112	14	7	21
	'31	91	22	143	172	428	1226	4	1230	309	15	1459	6	59	96	1944	15	21	36
	'30	132	104	178	127	541	2986	4	2990	514	11	2231	22	76	148	3002	77	42	119
	'29	238	211	389	285	1123	4164	9	4173	594	17	3312	26	170	320	4439	208	77	285
New York	'37	11304	8227	30028	44313	93872	57641	2797	60438	28039	2214	57833	4677	22235	23167	138165	5366	1668	7034
	'36	6248	6334	25960	44781	83323	56514	1730	58244	23343	2118	65595	2028	20252	16425	129761	5038	2088	7126
	'35	4695	2790	19028	30983	57496	68397	447	68844	13249	1300	46403	1724	16666	14383	93725	3933	2191	6124
	'34	3701	1195	10836	26431	42163	44109	454	44563	10012	1040	42868	809	8883	8772	72384	4048	2234	6282
	'33	4701	2884	11609	27147	46341	30004	474	30478	8625	1003	46827	789	5853	13119	76216	4646	487	5133
	'32	4371	3766	3473	17807	29417	25050	720	25770	10498	1629	37440	702	4275	6578	61122	4078	1249	5327
	'31	9077	3745	5710	11454	29986	53375	834	54209	16123	2650	59239	1373	7388	10507	97280	6020	2597	8617
	'30	8578	3828	5793	5851	24050	91747	977	92724	19528	2550	46813	1888	7244	9758	87781	7863	3994	11857
	'29	10805	6020	9479	6855	33159	76030	1317	77347	21317	3305	53753	3279	10538	17222	109414	18502	7063	25565
North Carolina	'37	1161	553	2822	7552	12088	14325	361	14686	2326	86	17179	258	1967	2586	24402	1249	203	1452
	'36	754	393	2584	7983	11714	11876	170	12046	1568	87	17894	122	1613	1758	23042	902	216	1118
	'35	704	364	2349	8190	11607	17384	21	17405	1208	34	18811	103	2089	2038	24283	1020	312	1332
	'34	610	145	1297	8397	10449	12509	19	12528	934	33	16824	59	963	1453	20266	1150	380	1530
	'33	456	150	962	5360	6928	6855	26	6881	378	24	11356	16	239	1315	13328	777	40	817
	'32	347	132	394	1201	2074	5179	18	5197	359	28	5503	27	176	501	6594	398	102	500
	'31	792	203	796	1347	3138	10268	16	10284	840	54	10364	38	347	956	12599	537	240	777
	'30	844	270	879	718	2711	16572	37	16609	1178	70	9414	62	270	792	11786	655	350	1005
	'29	1631	774	1920	1344	5669	29167	43	29210	2095	86	14809	129	835	2690	20644	2312	871	3183
North Dakota	'37	180	172	582	1376	2310	3974	83	4057	324	3	3649	33	407	419	4835	261	38	299
	'36	160	89	505	1346	2100	2991	57	3048	290	6	4250	11	303	312	5172	257	47	304
	'35	136	65	494	1709	2404	4556	5	4561	231	2	3946	8	411	446	5044	140	58	198
	'34	85	32	215	1114	1446	2466	3	2469	133	1	2790	10	198	250	3382	86	45	131
	'33	49	44	142	939	1174	1324	2	1326	98		2069		99	323	2589	36	3	39
	'32	43	26	79	295	443	1188	2	1190	119	1	1591		69	118	1898	32	10	42
	'31	143	28	181	314	666	2246	9	2255	218	3	2817	2	120	370	3530	64	38	102
	'30	215	104	215	413	947	5297	3	5300	266	1	3927	7	199	482	4882	187	69	256
	'29	343	244	563	754	1904	9985	9	9994	535	4	5284	15	473	1207	7518	604	155	759
Ohio	'37	7224	6849	18174	33358	65605	57662	1447	59109	12746	632	50987	1710	11865	16983	94923	6501	1113	7614
	'36	4355	3543	18216	37519	63633	55052	801	55853	9011	689	65020	838	12651	14312	102521	7064	1525	8589
	'35	2779	2203	12465	27843	45290	52077	131	52208	4532	365	40112	685	10511	10619	66824	4756	1615	6371
	'34	2006	884	6565	24740	34195	34288	106	34394	3624	262	33708	329	5112	4529	47564	3259	1343	4602
	'33	1999	2051	7450	21211	32711	20068	95	20163	2311	276	27452	258	2148	5005	37450	2657	204	2861
	'32	1443	2566	1718	8179	13906	15108	165	15273	2095	348	16712	203	1459	3058	23875	2154	497	2651
	'31	3043	2500	2611	7165	15319	29727	166	29893	3604	532	31126	310	3287	6132	44991	2972	1087	4059
	'30	3188	2572	3376	4826	13962	63154	232	63386	5458	673	34262	518	3933	6795	51639	4591	2050	6641
	'29	4565	4365	5963	5400	20293	83196	393	83589	9392	754	50948	900	9261	15463	86718	17557	4735	22292
Oklahoma	'37	846	751	3000	5996	10593	13494	386	13880	2473	94	14192	279	2798	3389	23225	946	172	1118
	'36	724	418	3026	6668	10836	14187	260	14447	2220	136	19539	171	2622	3162	27850	974	225	1199
	'35	572	306	2821	6432	10131	16668	33	16701	1382	60	16629	157	2677	2788	23693	697	260	957
	'34	432	168	1703	5762	8065	11247	29	11276	1032	54	13530	74	1479	1599	17768	566	289	855
	'33	322	224	1891	3904	6341	5796	17	5813	660	44	13208	40	402	1406	15760	186	24	210
	'32	273	281	633	1277	2464	4477	24	4501	634	64	7145	27	174	809	8853	130	46	176
	'31	436	126	1004	769	2335	6991	23	7014	1062	98	10185	37	215	1029	12626	135	130	265
	'30	762	408	1779	939	3888	22085	49	22134	2459	133	17607	128	519	1743	22589	417	250	667
	'29	1430	811	4261	1649	8151	37938	52	37990	4154	116	23117	250	1030	4468	33135	1741	670	2411
Oregon	'37	988	922	2404	4460	8774	7065	348	7413	1979	62	8260	210	1694	2201	14406	833	251	1084
	'36	729	707	3008	5063	9507	8455	272	8727	1625	80	10714	170	1678	2013	16280	1337	374	1711
	'35	461	314	1780	3792	6347	6900	15	6915	563	37	5697	89	1095	1226	8707	796	345	1141
	'34	281	151	815	2732	3979	3560	15	3575	357	27	3688	38	385	431	4926	317	222	539
	'33	227	201	695	1821	2944	2304	20	2324	245	13	3074	10	118	385	3845	249	13	262
	'32	174	157	158	611	1100	1730	26	1756	305	19	1906	10	122	205	2567	90	48	138
	'31	398	289	354	611	1652	4282	20	4302	615	47	4612	27	259	507	6067	144	113	257
	'30	420	329	531	473	1753	9084	30	9114	1039	36	5175	48	362	728	7388	495	254	749
	'29	638	398	1142	874	3052	12873	37	12910	1389	44	6985	78	781	1583	10860	1322	437	1759
Pennsylvania	'37	11646	8175	24627	43943	88391	54014	1863	55877	17993	932	54128	2357	16201	17837	109448	7108	1300	8408
	'36	6876	4232	23095	49748	83951	52112	1024	53136	15060	854	61713	1105	15519	14291	108542	6468	1555	8023
	'35	4627	2532	16182	33711	57052	53352	193	53545	7939	549	40343	943	11775	11187	72736	4152	1468	5620
	'34	3446	989	8912	28338	41685	35898	162	36060	5991	381	35934	383	6411	6796	55896	3315	1435	4750
	'33	3499	1843	8371	22809	36522	22557	177	22734	4311	361	33039	374	3840	7799	49724	3088	229	3317
	'32	3293	2557	2857	12504	21211	18337	233	18570	4686	493	24583	445	2213	4470	36890	2715	742	3457
	'31	5885	2723	4795	9709	23112	33836	278	34114	8327	988	42325	729	4232	7123	63724	4015	1587	5602
	'30	7083	3510	5759	7187	23539	71565	296	71861	10671	932	39093	1037	4667	7407	63807	5629	2807	8436
	'29	8682	4938	8452	7092	29164	76782	390	77172	13373	1089	45015	1832	7879	13103	82291	16895	5265	22160
Rhode Island	'37	680	514	1534	3378	6106	3495	162	3657	1164	101	3875	214	1441	1258	8053	397	69	466
	'36	434	352	1372	3812	5970	3410	86	3496	1074	118	4340	112	1290	989	7923	503	121	624
	'35	322	238	1122	2831	4513	3689	27	3716	597	42	3327	68	715	780	5529	230	107	337
	'34	226	120	494	2396	3236	2867	15	2882	514	43	2928	37	432	557	4511	268	127	395
	'33	286	321	429	2038	3074	2039	19	2058	395	20	2994	41	187	786	4423	319	26	345
	'32	283	329	197	1100	1909	1428	23	1451	467	47	1914	51	115	498	3092	292	64	356
	'31	593	498	452	717	2260	3244	32	3276	863	103	3508	94	176	880	5624	413	139	552
	'30	606	516	520	396	2038	5345	34	5379	958	92	3038	112	281	701	5182	451	204	655
	'29	880	719	814	530	2943	4793	42	4835	1250	153	3539	266	484	1271	6963	1275	333	1608
South Carolina	'37	415	263	1491	3458	5627	7429	130	7559	1000	26	8054	92	806	1091	11069	942	88	1030
	'36	261	135	1342	3706	5444	6074	70	6144	722	28	8462	31	628	699	10570	822	85	907
	'35	191	83	1139	2936	4349	7591	12	7603	441	7	7974	15	831	828	10096	562	94	656
	'34	212	60	730	3002	4004	6077	5	6082	352	8	7207	11	418	507	8503	433	148	581
	'33	125	58	617	2464	3264	3352	2	3354	165	2	6188	3	107	477	6942	316	8	324
	'32	93	114	139	409	755	2292	5	2297	181	6	2738	8	59	195	3187	134	40	174
	'31	306	184	263	538	1291	5110	3	5113	373	10	6103	16	146	413	7061	191	104	295
	'30	323	216	288	350	1177	8989	9	8998	561	10	6143	26	129	376	7245	245	157	402
	'29	512	380	483	577	1952	15278	10	15288	813	22	8761	42	358	1129	11125	720	354	1074
South Dakota	'37	306	135	758	1576	2775	3633	77	3710	556	3	3635	29	480	549	5252	182	30	212
	'36	199	113	785	1920	3017	3349	38	3387	543	5	4533	11	527	517	6136	313	61	374
	'35	151	170	633	1955	2909	4171		4171	323	2	3868	13	591	581	5378	317	106	423
(Cont.)	'34	80	39	285	985	1389	1914	3	1917	162		2569	3	262	242	3238	201	57	258

in States from 1929 through 1937

STATES		NASH GROUP			NON-AFFILIATED MANUFACTURERS												
		LaFayette	Nash	Totals	§§Auburn	Austin	Conti-nental	Franklin	Graham	Hupp	Packard	Pierce-Arrow	Reo	††Stude-baker	‡‡Willys	Miscel-laneous	Totals
New Mexico (Cont.)	'32		22	22	5	4		1	7		10	1	2	46	19	8	2334
	'31		55	55	4			3	11	3	7	4	8	50	80	53	3916
	'30		78	78	16	4		2	42	3	24	3	8	78	135	78	7123
	'29		161	161	29			5	106	29	33	2	28	200	664	236	11513
New York	'37	***	5855	5855	163	‡	‡	‡	1127	41	13404	16	‡	6298	3451	87	329951
	'36	1337	2704	4041	351	‡	‡	‡	1266	119	9542	102	201	5026	359	3862	303323
	'35	1392	1841	3233	592	‡	‡	‡	1874	679	6108	109	427	3051	196	47	242505
	'34	983	2403	3386	478	18	75	107	1527	846	1412	363	614	4791	265	61	179335
	'33		2192	2192	839	65	310	377	1525	1359	1901	531	658	5132	2506	200	175763
	'32		3971	3971	2160	46		460	1923	1604	2429	624	736	7618	4119	996	148322
	'31		7474	7474	5977			849	2666	2760	3320	916	1122	7676	7346	2537	232735
	'30		8525	8525	3227	407		1523	3623	3417	5860	1443	1447	8019	7837	4971	266211
	'29		16038	16038	3863			2122	6752	6135	8384	1764	1752	10524	19850	9776	332445
North Carolina	'37	***	489	489	14	‡	‡	‡	65		1150	2	‡	313	679	1	55341
	'36	87	124	211	13	‡	‡	‡	112	5	743		9	306	40	5	49364
	'35	114	57	171	39	‡	‡	‡	172	47	439	1	18	371	93	12	55990
	'34	86	70	156	59	60	43	1	134	60	33	5	11	498	118		45951
	'33		76	76	42	342	96	3	72	8	51	5	26	391	119	6	29191
	'32		47	47	115	219		2	32	24	55	10	6	224	154	27	15280
	'31		123	123	198			16	113	52	75	18	17	210	301	167	28088
	'30		270	270	29	52		46	230	66	131	17	25	205	439	147	33768
	'29		674	674	25			61	342	253	255	10	62	541	2544	698	64171
North Dakota	'37	***	214	214	1	‡	‡	‡	10		71		‡	153	109	1	12060
	'36	92	64	156	1	‡	‡	‡	50	1	48		13	173	28	1	11095
	'35	109	73	182	6	‡	‡	‡	20	13	24		5	152	2	1	12612
	'34	31	31	62	1				2	12	1		4	176	3	4	7693
	'33		12	12	3	2			1	3			4	81	24	5	5268
	'32		48	48	5				18	13	3		3	111	171	14	3959
	'31		105	105	31				61	23	3		14	136	396	89	7411
	'30		238	238	8	12		6	104	17	17		17	220	586	251	12861
	'29		584	584	19			9	257	65	45	3	21	380	1929	644	24081
Ohio	'37	***	4882	4882	44	‡	‡	‡	1441	36	6089	5	‡	4898	5533	13	250192
	'36	992	1597	2589	156	‡	‡	‡	1495	89	4360	32	221	4200	1125	2	244865
	'35	949	951	1900	313	‡	‡	‡	1428	439	2043	37	262	2541	725	7	180388
	'34	631	733	1364	588	12	82	19	1278	584	304	106	249	2627	471	6	128445
	'33		637	637	435	47	409	70	901	422	555	125	204	2401	1759	63	101218
	'32		985	985	853	16		130	863	810	592	85	220	2192	2214	296	64961
	'31		1977	1977	2296	88		279	1136	1123	840	205	387	2504	5178	1605	111880
	'30		2687	2687	941	207		607	1859	1560	1631	309	702	3071	5881	3246	158329
	'29		6015	6015	1419			674	4341	3315	2624	413	939	5181	19107	9140	266060
Oklahoma	'37	***	530	530	26	‡	‡	‡	82	2	787	3	‡	779	554	1	51580
	'36	193	259	452	67	‡	‡	‡	130	37	535	17	109	802	123	1	56605
	'35	239	151	390	55	‡	‡	‡	184	44	367	10	16	546	18	4	53116
	'34	112	100	212	295	5	1	1	179	129	65	13	34	469	10		39377
	'33		91	91	104	4	4	5	56	27	41	24	18	335	69	12	28914
	'32		108	108	107	6		11	54	53	103	25	28	297	215	26	17027
	'31		182	182	124			30	91	77	129	50	39	304	338	146	23750
	'30		507	507	88	71		92	314	222	314	112	140	473	1205	382	53198
	'29		1332	1332	221			118	701	505	516	128	393	1068	5240	898	92807
Oregon	'37	***	1280	1280	8	‡	‡	‡	481	9	662	1	‡	965	816	16	35915
	'36	423	580	1003	21	‡	‡	‡	609	23	566	4	75	1317	609	8	40460
	'35	231	249	480	49	‡	‡	‡	533	70	266	5	62	651	520	3	25749
	'34	61	106	167	15	14		6	345	43	34	9	49	360	248		14309
	'33		119	119	18	20	15	17	177	19	41	10	40	208	57	7	10123
	'32		208	208	38	2		11	137	14	40	8	28	260	143	41	6491
	'31		292	292	140			43	326	47	63	32	71	385	198	343	14218
	'30		326	326	49	84		86	399	180	131	28	134	522	371	797	22111
	'29		717	717	94			115	426	270	179	46	209	823	1279	1877	34616
Pennsylvania	'37	***	7682	7682	53	‡	‡	‡	1557	7	9844	13	‡	8378	4074	177	293909
	'36	1318	2501	3819	186	‡	‡	‡	1581	194	7021	101	233	6090	320	84	273281
	'35	1478	1652	3130	333	‡	‡	‡	1453	761	4005	130	362	2561	157	91	201936
	'34	860	1328	2188	388	37	41	28	1301	723	699	147	387	2627	149	59	147165
	'33		965	965	394	189	247	133	1055	820	979	163	364	2587	1099	133	121425
	'32		1908	1908	1029	157		233	1332	1875	1095	194	367	3297	3270	455	95340
	'31		3540	3540	2836			611	2180	1814	1719	382	440	3562	4992	2238	150866
	'30		4721	4721	1069	412		750	3156	2593	2975	706	964	4530	5692	4041	199252
	'29		8761	8761	1800			1216	5149	4618	4795	984	1355	6145	14499	8697	268806
Rhode Island	'37	***	472	472	15	‡	‡	‡	86	5	879	3	‡	614	139	4	20499
	'36	98	222	320	19	‡	‡	‡	70	3	527	8	12	278	7	52	19309
	'35	91	108	199	9	‡	‡	‡	59	51	223	15	40	99	6	14	14810
	'34	70	199	269	20	1		7	82	65	45	42	82	180	16	2	11835
	'33		147	147	23	3	9	24	67	68	46	45	71	222	119	5	10749
	'32		171	171	79	7		39	100	86	72	47	47	288	178	36	7958
	'31		333	333	310			55	159	161	107	92	155	346	285	118	13833
	'30		335	335	113	24		66	181	158	218	109	264	333	459	208	15722
	'29		748	748	191			175	584	282	359	138	359	544	1033	618	21380
South Carolina	'37	***	160	160	3	‡	‡	‡	17		731		‡	284	477	2	26959
	'36	16	38	54	8	‡	‡	‡	9	8	439		7	325	105		24020
	'35	19	17	36	37	‡	‡	‡	32	65	218		3	175	134	15	23419
	'34	17	28	45	65	47	9	2	36	62	22	1	9	271	156	1	19896
	'33		24	24	28	231	16		17	34	16	1	7	114	218	1	14591
	'32		17	17	43	119		1	11	52	21		8	82	42	2	6811
	'31		52	52	69			6	31	94	35	5	25	121	66	57	14321
	'30		134	134	2	39		13	60	99	81	2	41	145	104	80	18622
	'29		262	262				34	103	150	106	5	48	202	671	214	31234
South Dakota	'37	***	280	280	2	‡	‡	‡	14		163		‡	205	115		12728
	'36	119	92	211	3	‡	‡	‡	18	10	123		16	249	12		13556
	'35	140	109	249	3	‡	‡	‡	24	33	73	1	32	229	5	1	13531
	'34	60	48	108	1	1	4		13	18	1		11	235	3		7197

(Cont. on Page 26)

Who's Who

(Continued from Previous Page)

BISHOP & BABCOCK MFG. CO., THE 4901 Hamilton ave., Cleveland, O. Hot water heaters, thermostats, heat controls. F. N. Mizer, pres., gen. mgr.; E. L. Mayo, vice-pres.; W. C. Linehan, treas.; H. J. Lamoureux, sales mgr.; L. G. Zarbock, adv. mgr.; A. G. Getz, engr.; A. C. Mader, pur. agt. Det. Rep.—L. M. Payne, 415 Curtis bldg.

BLACKHAWK MFG. CO., 5325 W. Rogers st., Milwaukee, Wis. Socket wrenches, hydraulic hand, service and gauge jacks, wrenches, Porto-Power. H. P. Brumder, pres.; John Merker, vice-pres., gen. mgr.; L. E. Bertane, secy.; Hal Goehrig, sales mgr.; B. E. Hotvedt, adv. mgr.; E. M. Pfauser, engr.; G. Schwarm, pur. agt. Adv. Agcy. — Klau-Van Pieterson Dunlap 744 N. Fourth, Milwaukee, Wis.

BLAKESLEE, G. S. & CO., 19 st. and 52 ave., Cicero, Ill. Degreasing machines, degreasing solvent, Blakeslee Niagara alkali washing machines. G. R. Blakeslee, pres.; Gale Blakeslee, vice-pres.; M. B. Pickett, secy.; J. W. Dammers, treas.; J. J. Chat, shop supt.; W. N. Reiners, pur. agt. Det. Rep.—H. A. Sparrow, 18077 Roselawn ave.

B-L ELECTRIC MFG. CO., 1832 Washington ave., St. Louis, Mo. Rectifier units, battery boosters, auto radio filterpacs, organ power units, time clock rectopacs, laboratory rectopacs, heavy duty rectifier power units. Harold J. Wrape, pres.; Carl E. Peters, secy.; I. W. Veigel, treas.; Louis R. Conrath, sales engr., adv. mgr.

BLOCKSOM & CO., 5th and Canal sts., Michigan City, Ind. Sterilized curled hair, rubberized curled hair, carpet lining, insulation. B. H. Blocksom, pres.; R. Z. Blocksom, vice-pres.; M. G. Radtke, asst secy.; D. R. Glad, treas.; Arthur Leets, engr. Det. Rep.—A. E. Burridge, 311 Stormfeltz-Loveley bldg., 3090 E. Grand blvd.

BOHN ALUMINUM & BRASS CORP., 1400 Lafayette bldg., Detroit, Mich. Engine bearings, aluminum sand castings, aluminum permanent mold castings, brass, bronze and aluminum forgings, extruded brass, bronze and aluminum, non-ferrous ingot metals. Chas. B. Bohn, pres.; P. A. Markey, vice-pres.; S. D. Den Uyl, secy.; P. A. Markey, treas.; Emerson Frantz, sales mgr.; Clyde M. Adams, adv. mgr.; D. E. Anderson, engr.; L. F. Staffin, pur. agt.

BONNEY FORGE & TOOL WORKS, Allentown, Pa. Wrenches, sockets, punches, chisels, pliers, hammers, body and fender tools. Fred S. Durham, pres., gen. mgr.; J. E. Durham jr., vice-pres.; A. J. Male, secy.-treas., sales mgr.; S. R. Robinson, adv. mgr.; L. J. MacGregor, engr.; C. M. Brobst, pur. agt. Det. Rep.—Howard D. Wixson, 6432 Cass ave.

BORG & BECK Division of Borg-Warner Corp., 6558 S. Menard ave., Chicago, Ill. Automotive clutches. George W. Borg, pres.; D. E. Gamble, vice-pres., gen. mgr.; Mathew Keck, secy.; C. Bissell, treas.; C. M. Ahlene, sales mgr.; F. H. Lockwood, adv. mgr.; H. Nutt, engr.; L. R. Seen, pur. agt.; H. V. Reed, engr. Det. Rep.—J. D. Monroe, 4-146 General Motors bldg., Adv. Agcy. — McCann-Erickson, New York City.

BORG-WARNER CORP., 310 S. Michigan ave., Chicago, Ill. Clutches, transmissions, gears, radiators, carburetors, universal joints, starter ring gears, low and high pressure fuel injectors, steel and alloy steel, fabricated parts, merchants bars, reinforcing bars, structural steel tubing, automotive timing chains and sprockets. G. W. Borg, chmn.; C. S. Davis, pres.; H. E. Blood, exec. vice-pres.; J. L. Dryden, R. C. Ingersoll, vice-pres.; Matthew Keck, secy.-treas.; R. W. Dose, asst. secy., and asst. treas.; F. H. Lockwood, pub. dir.

BOUND BROOK OIL-LESS BEARING CO., Lincoln blvd., Bound Brook, N. J. Graphite and bronze bushings, bearings and washers, self-lubricating bushings, bearings and washers, impregnated wood bushings, bearings and washers, brass, bronze and aluminum castings. Wm. F. Jennings, pres., treas.; H. O. Johnson, secy., sales mgr.; P. G. Wellenkamp, factory supt.; C. Claus, research engr.; A. K. Smith, pur. agt. Det. Rep.—Moore Kelly, 1255 Book bldg.

BOWER ROLLER BEARING CO., 3040 Hart ave., Detroit, Mich. Taper roller bearings, spiral roller bearings, straight roller bearings, Bower-type roller bearings. C. H. Heller, chmn.; S. A. Strickland, pres.; W. S. Bennett, vice-pres.; Theo. C. Dye, secy.-treas.; E. M. Pratt, asst. secy.-treas.; Glen F. Johnson, gen. mgr.; W. S. Bennett, sales mgr., adv. mgr.; Thos. Zimmerman, engr.; E. M. Pratt, pur. agt. Adv. Agcy.—Fred M. Randall Co., Detroit, Mich.

BOWES "SEAL FAST" CORP., 147 and 222-230 North Pine st., Indianapolis, Ind. Tire and tube repairing materials and equipment, spark plugs, auto bulbs, battery cables, fan belts, radiator hose, automotive chemical products. Robert M. Bowes, pres.; Charles E. Bowes, vice-pres.; James B. Marshall, secy.; Mrs. M. F. Watson, treas.; L. P. Fisher, sales mgr.; David A. Henderson, adv. mgr.; Richard Whipple, pur. agt. Det. Rep.—Melvin W. Crawford, 1429 E. Hancock ave. Adv. Agcy.—Leo Burnett Co., Inc., 360 N. Michigan ave., Chicago, Ill.

(Continued on Next Page)

Who's Who

(Continued from Previous Page)

BOWSER, S. F. & CO., Inc., 1302 Creighton ave., E., Fort Wayne, Ind. Gasoline pumps, lubricating systems, oil dispensers, oil house systems, wheel tanks, service station equipment, liquid measuring meters, oil filters. R. Hosken Damon, pres.; E. D. Eggimann, exec. vice-pres. and treas.; E. C. Marsh, vice-pres. in chge of sales; H. J. Grosvenor, vice-pres.; J. F. Bartels, secy.; C. P. Griffith, chief engr.; Frank McKey, pur. agt.; R. E. Middleton, mfgr. engr. and plant mgr.; W. C. Strader, fcty. supt.; H. J. Slack, adv. mgr. **Det. Rep.**—D. C. Price, 12652 Livernois ave. **Adv. Agcy.**—Industrial Advertisers Co., 124 E. Branning ave., Fort Wayne, Ind.

BRADLEY MACHY. CO., 529 E. Jefferson ave., Detroit, Mich. Micrometers. L. G. Bradley, pres. **Adv. Agcy.**—Rolf Spinning, Inc., Maccabees bldg., Detroit.

BRANDT-WARNER MFG. CO., Loucks Mill rd., York, Penn. Automobile axle and drive shafts. W. C. Bulette, pres.; R. W. Warner, vice-pres.; D. Frank Magee, sales mgr.

BRAVO PRODUCTS CO., 6432 Cass ave., Detroit, Mich. Film and bug stain remover, rust and stain remover, motor and concrete cleaner, paint cleaner. R. K. White, pres.; Bert Haberer, Dr. Robt. H. Willard, vice-pres.; F. L. Pierce, secy., gen. mgr., sales mgr.; Robert H. Crooker, treas. **Adv. Agcy.**—Campbell-Ewald Co., General Motors bldg., Detroit.

BREWER-TITCHENER CORP., 111 Port Watson st., Cortland, N. Y. Special drop forgings and metal stampings. E. A. Brewer, pres., treas.; D. A. Brewer, vice-pres., pur. agt.; J. H. Greene, secy.; M. E. Maxon, sales mgr. **Det. Rep.**—L. B. Auger, 2988 E. Grand blvd.

BRIDGEPORT FABRICS, Inc., 805 Wood ave., Bridgeport, Conn. Woven fabrics for interior trim, elastic webbings, assist cords, robe rails. H. B. Naramore, pres.; E. J. Morrell, secy.; T. N. Wakeman, treas.; C. I. Thelin, asst. treas.; H. B. Naramore, sales mgr.; E. B. Moore, J. I. Hamm, engr.; H. A. Hubbell, pur, agt. **Det. Rep.**—George L. Guimond, 4-142 General Motors bldg.

BRIDGEPORT FABRICS, Inc., 805 Wood ave., Bridgeport, Conn. Elastic and non-elastic fabrics, upholstery trimmings, assist cords, robe rails, insulation tapes, wire filled fabric body mouldings. H. B. Naramore, pres., sales mgr.; E. J. Morrell, secy.; T. N. Wakeman, treas., adv. mgr.; J. I. Hamm, engr.; H. A. Hubbell, pur. agt. **Det. Rep.**—G. L. Guimond, E. D. Emmons, 4-142 General Motors bldg.

BRIGGS CLARIFIER CO., 3262 K st., N.W., Washington, D. C. Oil clarifiers for automotive, industrial and diesel applications. Chase Donaldson, pres., sales mgr., adv. mgr.; S. W. Briggs, Wm. Atkinson, vice-pres.; Wm. E. Furey, secy.-treas.; S. W. Briggs, gen. mgr.; Walter Bauer, engr.; S. W. Briggs, pur. agt. **Det. Rep.**—Charles Magee jr., 155 Highland ave. **Adv. Agcy.**—C. Frederic Bell, 444 Madison ave., New York City.

BRIGGS MFG. CO., 11631 Mack ave., Detroit, Mich. Automobile bodies, stampings, mouldings and miscellaneous parts. W. O. Briggs, chmn.; W. P. Brown, pres.; M. L. Briggs, W. D. Robinson, vice-pres.; H. W. Griffith, secy.; R. Pierce, treas.; A. D. Blackwood, asst. secy. and asst. treas.; F. J. Kennedy, gen. mfg. mgr.; A. J. Wettlaufer, sales mgr.; E. E. Lundberg, body engr.; C. R. Wylie, ind. engr.; W. J. Cleary, pur. agt.; Ralph S. Roberts and John Tjaarda, chief designers.

BRIGGS & STRATTON CORP., 2711 N. 13th st., Milwaukee, Wis. Gasoline motors, automotive ignition and body locks, automotive lighting and starting switches, spring covers, oil filters, automatic air valves. Stephen F. Briggs, chmn.; Charles L. Coughlin, pres.; H. M. Stratton, vice-pres.; R. W. Griffith, vice-pres. in chge. of mfg.; E. V. Oehler, vice-pres. in chge. of sales; L. G. Regner, secy.; E. Bodendoerfer, treas.; O. L. Sickert, sales mgr., automotive div.; H. W. Talbot, adv. mgr.; E. Jacobi, engr.; J. F. Bode, pur. agt **Det. Reps.**—H. J. Meakin and P. W. Trier, Briggs & Stratton Corp., 402 New Center bldg.

BRIGHT STAR BATTERY CO., 200 Crooks ave., Clifton, N. J. Flashlights and batteries, dry cells. I. Koretzky, pres.; A. I. Barash, secy.-treas., pur. agt.; A. J. Desimone, engr.

BROCKWAY MOTOR CO., INC., 106 Central ave., Cortland N. Y. Motor trucks, buses, bodies, cabs. Geo. A. Brockway, chmn.; Geo. S. Piroumoff, pres.; Joseph Gossner, vice-pres., and export mgr.; Frank C. Odell, secy.-treas.; C. C. Severance, prod. mgr.; L. L. Cross, asst. engr.; W. H. Pillars, asst. secy.; V. A. Phillabaum, asst. treas.; W. F. Blanden, asst. sales mgr.; Gerald D. Shira, adv. mgr.; Rodman S. Reed, chief engr.; W. S. Eddy, works mgr. and pur. agt.; A. H. Campbell, supt.; C. M. Bigelow, body engr.; R. N. Sears, fcty. engr.; P. L. Springer, mgr. tech. svc.; H. O. Keller, mgr. parts svc.

BROWN, ANDREW, CO., 5431 S. Riverside dr., Los Angeles, Calif. Lacquer, Polygloss, synthetic enamel, primer sealer, primer surfacer, thinners. Andrew Brown, pres.; W. E. Moore, vice-pres., secy.; O. C. Pumphrey, sales mgr., west; E. C. Seufert, sales

(Continued on Next Page)

STATES		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP							HUDS. GROUP		
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	*Buick	Cadillac	Chevrolet	La Salle	**Oldsmobile	†Pontiac	Totals	§Terraplane	Hudson	Totals
S. Dak. (Cont.)	'33	64	51	260	749	1124	1077	2	1079	73	4	1811	2	138	245	2273	71	4	75
	'32	95	61	129	362	647	1093	2	1095	108	2	1379	7	151	143	1790	50	15	65
	'31	257	125	381	520	1283	2552	2	2554	265	4	3321	2	453	311	4356	111	54	165
	'30	347	95	525	660	1627	7302	6	7308	389	5	5447	9	689	491	7030	282	133	415
	'29	410	233	1009	1088	2740	10998	2	11000	814	7	7053	17	1047	1220	10158	866	224	1090
Tennessee	'37	811	657	3206	6443	11117	10561	223	10784	1658	75	10855	269	1831	1628	16316	787	120	907
	'36	575	30	3051	6514	10441	9994	140	10134	1357	91	13563	148	1448	1463	18070	853	129	982
	'35	391	290	2202	5954	8837	11511	21	11532	836	47	11604	118	1353	1346	15304	670	171	841
	'34	275	113	1003	4774	6165	8155	30	8185	556	30	9637	45	710	560	11538	557	162	719
	'33	249	137	695	3752	4833	4121	16	4137	250	23	7838	19	273	563	8966	387	15	402
	'32	219	159	324	1114	1816	3195	16	3211	289	33	4489	31	140	225	5207	233	38	271
	'31	333	205	618	1068	2224	7427	24	7451	655	44	9446	36	331	487	10999	296	96	392
	'30	614	306	951	723	2594	17158	42	17200	1296	82	11038	108	421	749	13694	589	227	816
	'29	918	508	1756	987	4169	23020	48	23068	1723	116	14456	243	703	1690	18931	1812	368	2180
Texas	'37	3276	1807	9660	20318	35061	38614	1109	39723	7511	342	38785	888	8075	6616	62217	3061	594	3655
	'36	2216	1030	7939	20789	31974	39384	664	40048	5614	413	55300	497	7017	5563	74404	3531	704	4235
	'35	1927	858	6411	18030	27226	44351	72	44423	3661	203	43034	408	5606	6194	59106	2065	666	2731
	'34	1521	390	3714	15747	21372	32296	50	32346	2826	137	37997	198	2406	3477	47041	1402	575	1977
	'33	1083	430	2674	11239	15426	18462	47	18509	1557	78	37116	57	723	3353	42884	701	36	737
	'32	878	529	907	2460	4774	13620	64	13684	1786	123	18592	86	328	1438	22353	443	126	569
	'31	1635	973	1843	2496	6947	22835	60	22895	3132	215	28703	134	599	1919	34702	549	326	875
	'30	1999	1856	2874	2453	9182	51508	121	51629	5532	275	38118	268	957	3056	48206	943	455	1398
	'29	3301	3815	6335	4055	17506	84294	136	84430	8267	302	56111	475	2564	8392	76111	3815	1234	5049
Utah	'37	314	392	1121	1769	3596	3030	126	3156	676	15	3423	43	629	680	5466	437	99	536
	'36	203	328	1224	2079	3834	3140	101	3241	439	18	3731	22	611	435	5256	459	144.	603
	'35	166	211	886	1556	2819	2975	6	2981	192	11	2567	31	526	416	3743	213	104	317
	'34	126	52	441	1123	1742	1846	7	1853	202	8	1939	9	175	175	2508	179	121	300
	'33	79	70	272	1026	1447	923	6	929	132	7	1432	3	113	180	1867	140	9	149
	'32	11	54	67	175	307	725	5	730	131	7	883	4	57	108	1190	102	36	138
	'31	92	69	183	98	442	1700	5	1705	255	25	1909	11	87	188	2475	153	117	270
	'30	174	170	307	111	762	4243	8	4251	393	30	2482	20	163	300	3388	308	128	436
	'29	244	239	584	251	1318	6131	13	6144	549	49	3570	45	345	555	5113	882	280	1162
Vermont	'37	235	156	651	1156	2198	1696	41	1737	582	18	1952	110	458	556	3676	291	50	341
	'36	150	86	539	1349	2124	1733	33	1766	515	24	2169	38	465	466	3677	283	90	373
	'35	162	62	349	1122	1695	1899	3	1902	292	10	1673	37	454	412	2878	226	126	352
	'34	91	22	205	805	1123	1216	1	1217	226	12	1225	20	215	257	1955	232	103	335
	'33	90	46	167	619	922	760	1	761	137	5	1032	12	126	314	1626	243	23	266
	'32	77	48	94	395	614	902	3	905	235	7	1055	9	111	248	1665	221	52	273
	'31	196	84	202	442	924	1708	3	1711	385	23	1520	29	187	351	2495	350	149	499
	'30	309	92	252	412	1065	2994	7	3001	503	22	1660	49	172	353	2759	411	160	571
	'29	386	204	346	514	1450	2821	5	2826	665	39	1970	75	314	484	3587	935	355	1290
Virginia	'37	1000	889	3096	6876	11861	13463	328	13791	2335	82	14568	208	1787	2383	21363	853	167	1020
	'36	657	537	3357	7792	12343	12783	173	12956	1732	73	16512	104	1678	2026	22125	782	188	970
	'35	470	386	2455	6443	9754	15301	20	15321	1142	45	13726	103	1320	1827	18163	692	231	923
	'34	330	150	1174	4851	6505	10000	18	10018	707	26	10408	40	587	997	12765	653	246	899
	'33	312	346	1016	3461	5135	5421	13	5434	415	18	7954	16	316	1249	9968	553	31	584
	'32	301	392	474	1306	2473	6499	23	6522	586	59	7756	29	180	926	9536	528	125	653
	'31	789	580	890	1436	3695	12769	21	12790	1077	74	13846	40	429	1766	17232	777	311	1088
	'30	896	489	1052	928	3365	19427	35	19462	1377	63	13332	99	368	1711	16950	882	324	1206
	'29	963	673	1702	1317	4655	24546	39	24585	1878	85	15005	150	771	2724	20613	2386	617	3003
Washington	'37	1198	1111	3260	6884	12453	9131	351	9482	2724	93	10878	333	3256	2924	20208	1686	392	2078
	'36	901	1030	3727	8000	13658	12069	271	12340	1851	109	13170	134	3040	2278	20582	2128	621	2749
	'35	594	504	2795	5444	9337	10057	16	10073	830	56	7878	125	2218	1531	12638	1104	455	1559
	'34	407	262	1526	4035	6230	5774	18	5792	658	40	5619	56	1174	701	8248	686	410	1096
	'33	358	315	1322	3033	5028	3452	23	3475	461	25	4678	17	556	708	6445	470	25	495
	'32	350	306	329	1364	2349	2832	30	2862	542	36	2676	24	310	470	4058	217	112	329
	'31	652	596	604	1381	3233	6173	18	6191	1185	75	5786	32	637	944	8659	336	177	513
	'30	1032	792	811	1154	3789	15372	29	15401	2154	80	7534	75	805	1121	11769	933	415	1348
	'29	1666	1092	1711	1927	6396	18804	49	18853	2698	97	9047	151	1482	2124	15599	2483	841	3327
West Virginia	'37	1045	802	2334	5407	9588	7365	194	7559	1627	67	9496	180	1670	1574	14614	711	143	854
	'36	685	634	2620	6594	10533	7399	91	7490	1200	62	11877	79	1622	1471	16311	778	185	963
	'35	421	298	1911	5065	7695	7021	13	7034	570	23	6442	79	1293	967	9374	522	181	703
	'34	418	112	1417	4810	6757	5559	13	5572	448	14	5993	51	789	618	7913	538	170	708
	'33	367	170	1178	3246	4961	3243	15	3258	250	21	4534	15	293	663	5776	444	16	460
	'32	275	171	384	1217	2047	2463	15	2478	245	24	3056	21	152	465	3963	323	71	394
	'31	648	238	727	1274	2887	5249	19	5268	499	47	5763	35	344	1060	7750	392	158	550
	'30	636	345	1002	911	2894	10894	20	10914	693	43	7584	63	453	1145	9983	786	282	1068
	'29	895	656	1623	1065	4239	12714	53	12767	1215	64	9174	137	882	1698	13170	2056	440	2496
*Wisconsin	'37	2012	1649	6793	11537	21991	21977	487	22464	4740	180	21119	431	5516	5762	37748	1876	384	2260
	'36	1156	1018	6185	12060	20419	18769	303	19072	3236	167	26088	205	5361	4755	39812	2126	555	2681
	'35	902	559	4741	10247	16449	21234	28	21262	1762	99	16758	206	4309	4031	27165	1495	557	2052
	'34	547	197	2046	6391	9181	10352	18	10370	1228	68	12238	105	1860	1897	17396	901	355	1256
	'33	489	414	1858	4979	7740	5489	29	5518	808	64	8167	77	912	1919	11947	847	89	936
	'32	478	488	602	2488	4056	5233	30	5263	1129	139	7675	74	664	1252	10933	798	239	1037
	'31	1141	675	1638	2308	5762	10761	44	10805	2130	174	14998	116	1408	2864	21690	1261	554	1815
	'30	1449	788	1736	2230	6203	26175	49	26224	3296	200	18189	169	1659	3556	27069	1797	925	2722
	'29	1790	1376	2972	2950	9088	31944	76	32020	4728	164	20084	215	3012	6889	35092	6064	2072	8136
Wyoming	'37	231	145	657	1153	2186	2042	84	2126	538	3	2223	26	429	383	3602	266	58	324
	'36	173	105	787	1410	2475	2196	70	2266	407	9	2804	11	419	386	4036	340	86	426
	'35	91	68	523	971	1653	1982		1982	230	5	1779	8	421	417	2860	296	93	389
	'34	69	27	285	561	942	1223	2	1225	153	1	1462	4	147	180	1947	157	65	222
	'33	40	24	221	457	742	575	3	578	105		1083	2	52	168	1410	97	2	99
	'32	64	19	70	259	412	559	1	560	150	6	773	1	55	78	1063	95	16	111
	'31	121	17	204	215	557	1109	5	1114	213	13	1415	3	99	113	1856	141	51	192
	'30	143	41	209	149	542	1912	3	1915	269	7	1282	7	93	98	1756	116	47	163
	'29	236	106	526	344	1212	2834	3	2837	554	11	1752	18	234	268	2837	413	147	560
Dist. of Col.	'37	853	657	2494	4761	8765	5490	289	5779	2089	162	4972	312	1556	1779	10870	421	147	568
	'36	710	397	2947	5527	9581	8524	158	8682	1692	162	6639	202	1883	1420	11998	460	166	626
	'35	477	247	2316	4449	7489	9977	27	10004	956	109	5244	165	1589	1210	9273	394	227	621
	'34	331	96	928	2853	4208	6255	25	6280	545	66	4246	70	679	753	6359	356	201	557
	'33	317	149	935	1469	2870	3681	24	3705	497	38	4023	25	432	1082	6097	372	32	404
	'32	245	298	346	889	1778	3153	58	3211	546	76	4072	22	363	782	5861	348	75	423
	'31	455	373	643	958	2409	7765	44	7809	965	105	6711	69	636	1064	9550	368	122	490
	'30	347	190	329	365	1231	9016	47	9063	1026	106	3931	91	804	504	6462	456	179	635
	'29	584	176	377	244	1381	8028	72	8100	1293	154	3831	170	819	1398	7667	1278	357	1635

STATES		NASH GROUP			NON-AFFILIATED MANUFACTURERS												TOTALS
		LaFayette	Nash	Totals	§§Auburn	Austin	Continental	Franklin	Graham	Hupp	Packard	Pierce-Arrow	Reo	††Studebaker	‡‡Willys	Miscellaneous	
South Dakota (Cont.)	'33		25	25	5	1	7	1	21	22	8	1	6	177	22	2	4849
	'32		40	40	10	6			27	34	6	1	2	178	82	18	4001
	'31		103	103	31			1	42	100	23	1	11	213	324	142	9349
	'30		233	233	22	16		12	107	157	51	6	50	350	655	344	18383
	'29		577	577	61			8	360	290	64	2	64	570	2404	985	30373
Tennessee	'37	***	852	852	6	‡	‡	‡	79	12	981	1	‡	673	572	20	42320
	'36	208	267	475	11	‡	‡	‡	98	18	622	1	14	758	328	7	41959
	'35	211	208	419	34	‡	‡	‡	218	63	411	4	8	448	314	14	38447
	'34	159	94	253	18	56	12	6	198	69	49	4	7	548	245	5	28077
	'33		78	78	26	308	184	5	97	22	51	5	14	440	303	9	19880
	'32		117	117	82	131		13	94	82	68	13	16	325	227	23	11696
	'31		213	213	177			22	189	180	92	28	35	522	449	165	23138
	'30		318	318	66	100		55	362	328	223	93	70	731	817	244	37711
	'29		1017	1017	94			81	567	472	367	65	119	1037	2397	647	55211
Texas	'37	***	1321	1321	53	‡	‡	‡	213	17	3284	4	‡	3127	1369	49	150093
	'36	419	523	942	88	‡	‡	‡	327	37	2187	34	86	3366	266	1	157995
	'35	403	309	712	216	‡	‡	‡	361	245	1187	49	116	2012	313	29	138726
	'34	259	232	491	194	69	20	3	314	212	130	64	78	2079	228	4	106622
	'33		156	156	174	120	86	25	275	144	128	46	27	1439	265	6	80447
	'32		258	258	247	35		39	320	185	159	73	104	1257	466	71	44594
	'31		739	739	238			64	561	426	287	157	255	1530	968	495	71139
	'30		1105	1105	157	219		184	884	539	525	226	581	1732	2052	1296	119915
	'29		2889	2889	260			285	1886	1231	737	330	1153	2979	9953	2887	207686
Utah	'37	***	289	289	25	‡	‡	‡	175	2	345		‡	591	177		14358
	'36	124	183	307	27	‡	‡	‡	273	11	247		8	520	71		14398
	'35	142	155	297	14	‡	‡	‡	189	35	144		9	262	15		10825
	'34	54	85	139	18	14	2		109	13	11		12	165	1		6887
	'33		65	65	7	7	9	5	65	10	21		13	88	20	2	4704
	'32		66	66	28			4	66	23	35	1	7	92	23	19	2729
	'31		164	164	56			16	135	60	29	4	24	137	97	117	5731
	'30		227	227	86	16		34	195	67	77	8	37	188	96	333	10201
	'29		429	429	43			45	363	188	126	7	59	297	627	888	16809
Vermont	'37	***	218	218		‡	‡	‡	37		301		‡	129	161	1	8799
	'36	62	59	121		‡	‡	‡	20	2	216	2	5	87	19	1	8413
	'35	59	36	95	8	‡	‡	‡	29	17	139	2	8	62			7187
	'34	34	31	65	12	2		1	42	10	25	3	11	84	7		4892
	'33		26	26	1	3	1	3	28	20	26	4	10	57	19	1	3774
	'32		80	80	49			5	54	39	46	5	7	141	169	10	4062
	'31		191	191	87			6	44	89	55	10	35	104	284	25	6559
	'30		265	265	47	11		21	154	104	100	17	49	132	366	110	8772
	'29		659	659	19			25	225	154	134	26	57	304	958	214	11928
Virginia	'37	***	411	411	14	‡	‡	‡	104	1	1253	1	‡	432	500	17	50768
	'36	119	176	295	23	‡	‡	‡	190	27	858	10	20	495	33	1	50346
	'35	143	143	286	68	‡	‡	‡	211	99	487	23	36	374	57	11	45813
	'34	85	141	226	60	52	10		210	78	61	10	36	415	27		31372
	'33		86	86	25	89	16	6	157	81	93	13	15	377	90	11	22180
	'32		201	201	105	35		12	190	172	116	23	22	378	342	33	20813
	'31		335	335	229			17	216	353	195	48	51	489	527	226	37491
	'30		419	419	87	58		57	361	398	235	59	113	471	924	487	44652
	'29		806	806	101			62	490	625	373	56	150	646	2670	873	59708
Washington	'37	***	1084	1084	21	‡	‡	‡	354	18	1086	2	‡	1676	1202	35	49699
	'36	294	471	765	56	‡	‡	‡	446	45	823	9	35	2106	833	11	54458
	'35	150	185	335	85	‡	‡	‡	314	123	353	8	45	1208	601	6	36685
	'34	44	81	125	62	23	21	10	257	35	41	17	48	884	230	1	23120
	'33		77	77	11	20	38	21	162	10	39	14	38	557	187	16	16633
	'32		331	331	89	16		36	170	79	94	10	53	654	258	83	11471
	'31		335	335	246			43	257	286	116	34	119	864	714	436	22046
	'30		525	525	199	77		114	385	555	238	32	193	986	1167	1137	37915
	'29		1224	1224	318			147	802	677	376	54	258	1593	2324	2802	54750
West Virginia	'37	***	464	464	1	‡	‡	‡	225	2	923		‡	747	699	3	35679
	'36	134	208	342	15	‡	‡	‡	210	14	589	2	55	690	56	2	37272
	'35	151	146	297	25	‡	‡	‡	141	64	288	3	56	357	45	1	26083
	'34	106	156	262	51	1	4	2	151	62	43	5	76	383	38	1	22029
	'33		78	78	54	9	34	7	122	33	64	2	44	304	116	4	15326
	'32		148	148	90	4		6	162	47	85	5	40	299	361	37	10166
	'31		284	284	270			15	274	131	117	9	95	284	828	169	18931
	'30		498	498	79	25		57	458	171	175	27	157	414	1117	410	28447
	'29		906	906	93			45	807	309	267	45	196	595	2312	930	39177
Wisconsin	'37	***	7469	7469	5	‡	‡	‡	364		1881	6	‡	1992	1048	8	97,241
	'36	1374	2000	3374	30	‡	‡	‡	440	34	1635	7	109	1913	40	3	89569
	'35	1517	1274	2791	59	‡	‡	‡	332	274	929	14	137	1061	39	4	72568
	'34	626	660	1286	51	4	34	2	251	175	98	24	72	769	29	10	41008
	'33		502	502	38	8	80	6	162	61	139	24	93	803	225	26	28308
	'32		827	827	257	8		8	303	276	193	48	67	984	934	214	25410
	'31		1724	1724	774			41	501	303	274	81	149	1299	1492	612	47322
	'30		2348	2348	223	63		121	888	436	421	140	229	1742	2203	1111	72143
	'29		4319	4319	270			217	1702	700	586	187	285	2408	6077	2514	103601
Wyoming	'37	***	175	175	8	‡	‡	‡	58	3	158		‡	178	150		8968
	'36	50	86	136	7	‡	‡	‡	40	2	91	2	5	193	14		9693
	'35	42	45	87	10	‡	‡	‡	31	11	36		13	96	2		7170
	'34	18	37	55	3				6		2		10	100	1		4513
	'33		16	16	3		2		9	3	7	2	7	57	10		2945
	'32		44	44	14	1			15	19	10	3	6	71	33	5	2367
	'31		97	97	20			2	14	47	6	3	13	99	81	19	4120
	'30		104	104	7	5		8	36	58	15	3	10	74	98	40	4834
	'29		335	335	22			11	58	81	28	40	33	182	420	249	8905
District of Columbia	'37	***	111	111	15	‡	‡	‡	103	14	1172	3	‡	575	261	23	28259
	'36	44	142	186	22	‡	‡	‡	27	16	972	19	6	628	21	3	32787
	'35	87	117	204	142	‡	‡	‡	109	128	570	25	9	416	16	3	29009
	'34	54	126	180	61	9	3	1	122	120	81	25	16	457	22	22	18523
	'33		144	144	47	27	2	18	132	110	142	31	4	454	60	128	14375
	'32		304	304	296	13		18	186	159	231	30	14	484	220	29	13257
	'31		410	410	333			34	317	273	295	61	27	512	300	278	23098
	'30		291	291	114	39		50	293	241	356	67	63	416	224	743	20288
	'29		676	676	142			90	545	405	417	90	154	538	576	742	23188

Who's Who

(Continued from Previous Page)

mgr., east; Mrs. Hollis Molinaire, adv. mgr.; B. E. Preston, engr.; J. E. Heft, pur. agt. **Det. Rep.**—Guy R. Vaughan, 329 Baker, Royal Oak, Mich.

BRUNNER MFG. CO., 1821 Broad st., Utica, N. Y. Air compressor, refrigeration equipment. G. L. Brunner, pres.; G. L. Brunner jr., secy.; A. G. Zumbrun, treas.; B. J. Scholl, sales mgr., adv. mgr.; S. R. Hirsch and S. J. Benn, engrs.; E. H. Schiller, pur. agt. **Det. Rep.**—W. D. Rockwell, 74 Keith rd., Grosse Ile, Mich. **Adv. Agcy.** Addison Vars, Inc., Buffalo, N. Y.

BRYANT CHUCKING GRINDER CO., 257 Clinton st., Springfield, Vt. Grinding machines, cam, profile, chucking, internal, tool, hole and face. R. E. Flanders, pres.; W. J. Bryant, vice-pres.; J. E. Stetson, treas., gen. mgr.; J. L. Hronek, supt.; J. B. Johnson, chief engr.; M. H. Arms, des. engr. **Det. Rep.** — Motch & Merryweather Mchy. Co., W. Third and Lakeside ave.

BUCHANAN, C. G. CHEMICAL CO., 4650-64 Basker ave., Norwood, Cincinnati, O. Case-hardening, rust preventative, soldering salts, carburizing, welding, cleaning. C. G. Buchanan, pres., gen. mgr.; N. N. Burns, vice-pres., secy.; G. R. Buchanan, treas.; R. R. Buchanan, chief chemist; John Netter, sales mgr.; F. M. LaBolteaux, engr. **Det Rep.**—Alfred T. Wagner.

BUCKEYE FORGING CO., 10003 Harvard ave., S.E., Cleveland, O. Brake rods, small drop forgings, eye-bolts, hooks, etc. James W. Baxter, pres.; Harry F. Bower, vice-pres.; Paul W. Andrus, secy.; Edwin T. C. Schwan, treas. **Det. Rep.**—Carl E. Andrus, General Motors bldg.

BUCKEYE PORTABLE TOOL CO., 29 W. Apple st., Dayton, O. Portable pneumatic and high frequency electric tools. Homer R. Mitchell, pres.; M. J. McCombs, vice-pres., gen. mgr.; A. G. Lauzon, secy.-treas.; H. O. Gummers, sales mgr.; A. G. Lauzon, adv. mgr.; L. G. Webster, engr.; E. E. Reeves, pur. agt. **Det. Rep.**—J. B. Marlay, 2842 W. Grand blvd.

BUDA CO., Commercial ave., Harvey, Ill. Diesel engines, gasoline engines, railway equipment and supplies. L. M. Viles, pres.; F. E. Place, E. D. Conant, vice-pres.; R. B. Fisher, R. K. Mangan, vice-pres., sales mgr.; J. S. Dempsey, vice-pres., treas.; R. R. Hughes, adv. mgr.; W. A. Parrish, chief engr.; W. O. McBratney, pur. agt. **Adv. Agcy.**—Russell T. Gray, Inc., 205 W. Wacker dr., Chicago, Ill.

BUDD, EDWARD G. MFG. CO., Philadelphia, Pa. All steel automobile bodies and stampings, die and tool work, automobile truck, bus and trailer bodies. Edward G. Budd, pres.; Donald Alexander, Edward G. Budd jr., vice-pres.; Halton A. Coward, secy., adv. mgr.; Paul Zens, treas.; Joseph Ledwinka, engr.; Frank S. White, pur. agt. **Det. Rep.** — Donald Alexander, 12141 Charlevoix ave. **Adv. Agcy.**—N. W. Ayer & Son, Inc., Philadelphia, Pa.

BUDD WHEEL CO., 12141 Charlevoix ave., Detroit, Mich. Passenger car wheels, hubs and brake drums, brakes, truck wheels, hubs and brake drums. Edward G. Budd sr., chmn., pres.; Donald Alexander, vice-pres.; W. H. Farr, vice-pres. in chge. mfg.; H. A. Coward, secy.; Paul Zens, treas.; W. H. Farr, gen. mgr.; E. A. Clark, sales mgr.; C. L. Eksergian, engr.; W. R. Davies, pur. agt.

BUELL MFG. CO., 2975-77 Cottage Grove ave., Chicago, Ill. Air pressure horns, air compressors, pressure gauges, auto finish dressing. R. D. Buell, pres.; Jay E. Burns, vice-pres., secy., gen. mgr., pur. agt.; R. D. Buell treas.

BUICK MOTOR DIV., General Motors Sales Corp., Flint, Mich. Harlow H. Curtice, pres., gen. mgr.; W. F. Hufstader, vice-pres. gen. sales mgr.; D. E. Williams, compt.; L. A. Stewart, chief pur. agt.; Chas. Chayne, chief engr. **Adv. Agcy.**—Arthur Kudner, Inc., New York City.

BULLARD CO., 286 Canfield ave., Bridgeport, Conn. Machine tools, lathes, jaws, bars, chucks, cleaners. E. P. Bullard jr., chmn., pres.; E. C. Bullard, vice-pres., gen. mgr.; D. B. Bullard, vice-pres. of engr.; J. W. Bray, vice-pres. of sales; A. E. North, secy.-treas.; E. P. Blanchard, sales mgr.; R. C. Bullard, adv. mgr.; R. T. Phipps, pur. agt. **Det. Rep.**—F. Archer Thompson, 309 Professional bldg.

BUNDY TUBING CO., 10951 Hern ave., Detroit, Mich. Bundyweld tubing. A. F. Knoblock, chmn.; W. W. Anderson, pres.; T. M. Rude, vice-pres., gen. mgr.; Arthur Gardner, secy.; A. C. Winger, treas.; G. D. Baker, sales mgr., adv. mgr.; E. Q. Smith, pur. agt. **Adv. Agcy.**—Holden, Graham & Clark, 900 Donovan bldg., Detroit, Mich.

(See display advertising index)

BUNTING BRASS & BRONZE CO., 715 Spencer st., Toledo, O. Automotive bushings, standardized bronze bushings, king bolt assemblies, connecting rod liners, precision bronze bars, anti-friction babbit. C. E. Bunting, pres., treas.; J. W. Bunting, W. H. Bunting, vice-pres.; D. McKercher, vice-pres., and exec. vice-pres.; W. F. Volk, secy. and asst. treas.; Geo. H. Adams, sales mgr.; Ed. J. Butler, sales mgr. repl. div.; Sterling Beeson, adv. mgr.;

(Continued on Page 30)

New Passenger Car Registrations By States

Figures supplied by R. L. Polk & Co., New Jersey Motor List Co. and Sherlock & Arnold.

MONTHS		Alabama	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	Florida	Georgia	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri	Montana	Nebraska
January	'37	2071	1132	2698	17106	2794	3344	686	6050	7793	1170	25799	10164	4222	6679	2800	3661	1575	3370	8755	18845	5059	2183	10574	2044	3196
	'36	1869	993	2456	11265	3216	2093	472	3752	5189	1194	18450	6314	3917	5956	2995	3486	907	2027	5271	15507	4274	1293	10113	2601	3742
	'35	1785	518	1681	9261	1736	1063	314	2194	2747	473	9120	2616	2229	4031	2230	1610	190	1732	2831	10150	1862	937	5761	852	1936
	'34	676	196	581	4603	1534	620	141	1413	1271	275	3679	1804	1107	1794	645	894	213	698	1914	4263	977	282	1182	200	1155
	'33	625	183	1536	5984	1175	923	241	1555	632	141	5909	2812	1078	682	1507	1235	346	1387	2782	4632	1333	368	1296	69	807
	'32	732	206	1594	6830	2095	1041	255	1713	1798	214	5164	5180	1111	1080	1041	950	430	1292	3135	4137	1270	437	1561	108	1149
	'31	877	423	1249	12379	2343	1337	291	3282	2455	549	9356	3772	2679	3259	2055	1261	303	1609	3638	5993	2361	475	1983	767	3183
	'30	2860	872	2555	13902	4154	1564	441	3672	2540	715	12555	5482	3851	1936	2828	2947	214	2298	3997	9913	2581	1459	2808	1072	4603
February	'37	2209	674	1514	18905	2482	1954	477	3393	4094	933	18172	7234	2978	4453	2842	1722	674	2341	6518	14557	3474	1129	8654	987	2183
	'36	1863	808	1997	19801	2137	1151	358	2496	3638	661	11586	5229	2083	3188	2454	2682	544	1770	4542	13746	2886	1087	7385	949	2151
	'35	1850	639	1657	12342	2470	1553	428	2789	3413	611	12748	2838	3262	3083	2740	2140	398	2299	4016	13327	2686	1350	6604	1009	2210
	'34	1385	346	1554	6470	1149	889	168	1249	2226	298	4321	1732	1822	1544	2006	947	258	1281	2749	8839	1503	836	4188	706	1302
	'33	538	158	844	5198	711	975	219	1548	212	94	3801	1474	926	632	1092	906	303	1198	2683	4063	1107	444	3941	31	385
	'32	695	198	578	5278	876	1049	212	1367	960	131	5062	2359	1049	1090	1161	801	267	1375	2820	4230	1799	451	6222	164	954
	'31	821	395	707	9797	1367	1669	340	1904	2863	388	9772	3375	3530	2060	1926	956	542	2074	4077	7817	1678	485	9848	748	2503
	'30	2335	944	1640	17711	2126	2389	533	4429	3218	787	13678	6374	5073	2243	2922	2313	385	2892	6282	11742	3372	2280	14030	915	3986
March	'37	3670	983	2694	25129	3321	5986	891	3978	5905	1634	25422	15949	6706	4576	4994	2927	2221	5245	13826	18270	9164	2251	11084	2089	2780
	'36	2457	832	1628	20664	1823	4550	808	2609	4065	1362	22345	8323	5511	4828	4203	2943	1078	3622	9049	16464	6288	1774	10442	2066	3094
	'35	1862	761	1460	20372	1562	3556	648	4014	4376	1124	17343	7246	5777	4964	3833	2477	1010	3633	9929	17260	6047	1683	9810	1944	2184
	'34	1827	458	1702	11046	931	2323	426	3397	3144	632	8596	4834	4480	3752	2432	1813	667	2047	7435	10630	4435	1365	8103	860	1677
	'33	453	185	495	5883	488	1223	265	1315	997	157	5053	2677	1157	635	1029	536	453	1002	3261	3284	1792	392	4111	600	789
	'32	471	187	324	6541	620	1645	301	1096	895	216	5376	2638	1387	872	951	643	812	1499	4336	4318	2459	312	6683	697	920
	'31	1515	572	799	15689	1188	3300	564	2322	2483	582	11583	5883	4856	2601	2354	1643	1451	3259	9616	10758	8186	944	8973	1100	1961
	'30	2364	1013	1992	19898	1702	4455	869	2985	2537	1174	20859	12909	9404	3472	4265	2507	1353	4377	12307	17719	7226	2645	17517	1479	3891
April	'37	4221	1380	1724	24665	3426	5955	1067	5780	4697	1867	27670	13694	7712	5541	4691	3416	2807	4671	15623	22695	11218	2287	9788	1974	3854
	'36	3342	433	1547	24764	4801	6602	998	5280	4023	1638	26841	24031	9027	6364	6183	2967	2830	5315	21728	27904	10251	2235	8157	2471	4255
	'35	3851	404	1652	20446	2657	5531	809	3055	4281	1579	22443	8704	8252	5382	4294	2689	2142	4038	14024	16641	7985	2081	8204	2106	4222
	'34	2701	385	1450	11764	2624	3835	692	2887	3734	785	14117	5882	4225	3048	3036	2289	1370	2994	11218	12801	4933	1723	6281	1092	3149
	'33	969	135	594	7617	1055	2241	382	1165	2158	285	8132	2111	1964	521	1597	939	802	1549	6804	4365	2184	596	5336	795	1432
	'32	900	155	409	6188	1105	2326	341	847	1553	242	7982	3696	2525	1042	1410	879	1247	1860	7768	5116	3231	426	4024	702	1442
	'31	2087	340	964	15655	2688	4834	690	2575	2904	649	17004	9391	6522	3777	3402	1917	2957	3738	15131	14166	7816	1310	6886	1108	3610
	'30	2878	753	2310	18939	3742	6249	987	2915	2812	1487	22415	8475	11241	9214	5288	2804	2843	5076	17506	20954	14501	3003	10784	1302	4990
May	'37	3926	1280	1668	23294	3576	6770	1236	3727	4950	1414	27653	11710	8045	4261	4891	3092	3216	5179	15676	28753	11962	2654	8292	2220	3517
	'36	2879	2105	1558	26865	3828	5086	935	3215	4135	1431	27421	12728	9315	5098	5084	3091	3313	4954	16543	27627	12118	2294	7878	2750	4172
	'35	2561	1429	1622	17727	2173	4579	740	3003	3810	1467	19337	15374	7692	4964	3642	2262	2209	3753	11406	19512	8641	1717	6876	2138	3377
	'34	2177	949	1365	10803	1894	3788	572	2675	3544	762	11856	5871	4137	3149	2852	1990	2317	2735	9604	16210	4667	1583	6490	1195	2407
	'33	1237	526	924	9304	1426	2953	534	1296	2976	371	9034	2718	2795	2068	2267	1268	1142	1982	8725	11841	4312	908	3449	850	1598
	'32	790	334	428	5928	1105	2214	397	944	1440	310	7701	3046	2579	2343	1670	856	1451	2116	7432	8875	3761	608	3582	487	1339
	'31	1929	989	871	14272	2159	4285	706	2456	2541	802	15329	7803	5905	2789	3167	1963	2933	3624	13075	13921	6882	1370	5724	1037	3084
	'30	2578	1397	1883	17802	3224	5813	911	2586	3091	1431	23046	10164	10138	5673	4639	2685	3414	4361	15431	21076	11064	2473	8756	1519	4191
June	'37	3499	1422	898	25453	3312	5979	1096	3206	4796	1441	24990	12685	7552	3850	4039	3129	2698	5175	12932	26467	7695	2090	7746	3005	3055
	'36	3894	1369	634	27389	3525	7189	957	3322	4778	1572	25652	11301	9379	4113	2502	3851	2769	5791	13517	22260	9282	2706	8307	2382	3732
	'35	1681	988	920	19378	2697	4060	764	1811	3376	987	17431	15172	8100	4227	3469	2864	1939	3363	9380	22641	7093	1325	6570	1832	3540
	'34	2396	773	973	12228	2204	3674	598	1994	3817	639	12623	5785	4334	2251	4116	2225	2034	3105	9127	16934	3869	1802	5859	888	2336
	'33	1227	511	1118	11155	1467	2918	477	2098	3001	407	8348	6910	3200	2319	2224	1438	1251	2263	8056	12491	4937	1138	4693	573	1771
	'32	822	301	486	8652	1316	2366	504	1647	1215	283	7619	3509	3092	1221	1850	1303	1336	2851	7508	11358	3676	777	4241	349	1417
	'31	1415	509	616	13772	2204	3594	565	3162	2195	696	11241	4251	5056	1928	2989	1915	2085	3412	10098	10653	3998	1087	6242	700	2541
	'30	2055	866	882	16991	2718	4702	798	2554	2437	894	16339	6105	8309	3133	3507	2289	3000	3747	11526	14867	6379	2241	6772	1005	4065
July	'37	3517	579	2867	3212	22252	5553	1058	3297	4339	999	26255	15753	7253	5249	4315	3296	1846	4809	10636	33246	10589	2065	8571	1225	4358
	'36	3062	1323	3630	25097	3308	5653	851	4295	4460	1180	25853	11572	7162	7544	3540	3762	1745	4945	10942	21213	10334	2229	9520	2618	4511
	'35	2961	923	2933	18373	2766	3891	815	3371	3742	987	20474	9736	8149	6004	3738	2776	1275	3952	8502	16222	9605	2238	7745	2264	4309
	'34	2784	716	2692	12631	1805	3194	612	3405	3945	538	15021	7934	4108	5615	2650	2711	1312	2872	7789	12731	4385	1859	6056	1362	2309
	'33	1695	369	1369	11697	1494	2834	520	1884	2767	318	12230	4729	3647	6130	2271	1797	1084	2277	7392	11403	4230	1261	4195	1157	1998
	'32	591	183	1017	6270	733	1669	240	1220	1698	175	7154	3139	3647	6130	2271	1797	1084	2277	7392	11403	4230	1261	4195	675	1070
	'31	1279	523	1804	12892	1759	3357	472	1969	1343	492	13874	4574	4516	3566	2789	1884	1414	2674	8982	9161	4992	1385	4524	1001	2490
	'30	1647	688	3937	16408	2273	4127	639	2355	1226	853	16883	4922	6601	6239	2816	2381	2118	3269	9958	11275	6790	1779	4577	1250	3499
August	'37	3001	1375	1756	20981	2666	4456	1050	3031	4193	1353	21493	10138	6332	6356	3831	2983	1249	4245	8933	22503	6190	2309	7457	1394	3449
	'36	2737	892	1554	19578	4210	2615	708	3082	4109	18669	1449	8496	4946	5472	2646	2880	1159	3583	7951	15100	5949	2598	6719	1609	3139
	'35	2274	781	1740	15955	2182	3839	602	2492	4028	1092	16138	7722	6519	4954	2952	2540	945	3083	7061	12467	6568	1694	6642	1671	3583
	'34	2201	696	1228	13539	1760	2873	541	2431	3007	912	12163	4653	3761	3409	2405	2476	938	2516	6555	9390	3436	1626	5162	1075	2095
	'33	1986	390	1421	10740	1215	2930	433	1850	3057	393	9991	3860	3624	3222	2466	1932	982	2337	7397	9103	3468	1456	5558	714	2173
	'32	714	222	500	6346	691	1500	289	1062	1287	198	5509	2560	1597	1601	1429	1083	440	1655	4040	4998	2290	610	3137	297	950
	'31	1020	413	1018	11134	1359	2653	409	1783	3787	458	10404	4275	3605	2075	2203	1489	1073	2847	7034	5219	3580	868	5756	620	1792
	'30	1592	641	1405	15676	1905	3498	620	1821	4364	925	12113	4942	5602	3913	2217	1919	1506	2897	8383	7230	4199	1500	7145	1540	3151
September	'37	2110	1369	926	17258	2254	3010	610	2270	3070	1057	15731	9208	4712	5911	2411	2574	1375	2879	6680	18402	5149	1642	5754	1284	2434
	'36	2093	911	1142	16465	2085	2763	494	2761	3130	1253	13760	8018	4138	3464	2047	2816	1281	2743	6197	13791	5329	2322	5458	1391	2528
	'35	1714	625	1096	12289	1166	2142	347	1919	2402	853	10066	5592	3979	3451	1826	1748	1018	1956	4649	8236	3514	1541	4261	1508	2542
	'34	2052	585	1132	10811	1241	1887	346	2033	3486	817	9245	5078	3072	2629	2038	2974	941	1825	4437	5310	2830	1725	3665	920	1878
	'33	1448	351	1081	9635	894	2561	387	1462	3374	420	8210	5526	2918	3242	2323	1790	1257	2022	6206	11948	2748	1395	5141	413	1911
	'32	685	213	371	6021	551	1271	213	1135	1183	115	4325	2231	1438	1786	1136	1099	606	1381	3527	3478	1457	795	2642	236	777
	'31	781	408	490	10048	1101	2252	344	1455	1718	352	7597	4081	2574	1403	2033	1243	992	2037	5661	6393	2105	661	3816	317	1322
	'30	1366	573	971	15405	1767	2827	510	2113	2217	731	10446	4527	5354	2493	2190	1876	1470	2464	7098	8565	3650	1118	4791	504	3197
October	'37	3054	764	1595	17051	2301	3258	497	2453	2162	823	12785	5352	4035	3932	2049	2321	1093	2747	6562	13592	5490	1274	4578	909	1981
	'36	2990	574	1733	14440	1803	3214	344	2264	2101	835	11035	5024	3788	2809	1587	1964	880	2469	5517	9659	4187	1631	4686	938	2341
	'35	3098	603	1276	11824	1649	2522	389	1969	2142	650	9227	3187	3009	2450	1498	1956	758	2058	5224	8522	3651	1487	3661	1069	1736
	'34	3229	496	1724	9107	1220	1968	332	1697	2321	637	8057	5076	3368	2259	1469	2109	858	1987	4520	5188	3124	1612	4189	818	1373
	'33	2322	336	1196	8748	788	2465	309	1412	2750	339	7333	3189	2447	2587	1649	1844	847	2017	5022	5841	2472	1387	3619	559	1717
	'32	891	202	1042	5104	490	970	170	965	1012	74	2979	1251	1044	1321	798	910	423	1018	2728	2165	1263	502	1904	260	634
	'31	1480	312	763	7948	991	2105	297	1416	1382	210	5412	2347	2088	1879	1446	1309	806	1629	4619	3936	2126	530	2826	396	1237
	'30	2322	475	1241	13006	1528	2716	354	2182	2028	561	7648	2876	4107	3267	1659	1990	1006	2152	5592	4989	3592	956	3589	739	2703
November	'37	2235	802	1068	18667	1731	2745	589	2162	1860	850	10438	6771	3446	2122	2383	1952	917	3186	5876	13760	4094	1106	4281	692	1716
	'36	4206	907	1183	18623	2508	3646	615	2270	2489	722	9629	5136	3981	2812	2792	2435	894	3013	6662	20055	5176	1188	4430	658	2043
	'35	3876	874	1253	18607	1649	3761	613	2011	2789	656	10799	6436	4362	2502	2883	2768	863	3174	7562	18754	4362	1704	4647	658	2557
	'34	3062	466	1010	7505	1190	1409	240	1641	2071	628	5931	2627	2127	2501	1340	1564	526	1379	3304	4486	2148	1118	3115	534	1318
	'33	1526	278	829	7198	656	1635	196	1188	1748	347	5001	1927	1917	1465	1096	1512	497	1389	3390	3740	1399	995	2698	211	1209
	'32	676	164	293	4028	330	837	118	755	685	110	1804	854	653	779	606	609	224	636	2160	1560	687	281	1403	84	380
	'31	1558	256	373	5586	518	1513	222	937	848	231	3868	1443	1417	1392	1003	952	514	1166	3178	3416	1830	318	2505	179	836
	'30	2379	304	421	9167	926	1824	280	1278	780	505	4418	1476	2520	1695	1115	1368	538	1263	3672	4201	2077	613	3066	209	1603
December	'37	1423	802	385	15314	1430	2258	491	4098	964	598	13807	5314	5203	3385	2145	3011	377	2521	3586	10087	9790	1656	3186	239	1217
	'36	3806	1615	550	31304	4077	5185	937	2642	1464	1141	24888	10108	8636	2446	4076	4594	490	4496	9342	23699	5699	6349	4592	312	1987
	'35	2164	1149	538	20393	3348	3508	650	3852	1164	605	17076	6417	7625	3653	2663	3449	364	3537	5539	18872	3444	1469	4134	354	2031
	'34	1070	406	346	5614	1149	887	200	1895	669	293	3678	1871	2078	984	900	1280	139	1491	1884	2991	1266	373	1438	139	779
	'33	488	203	219	4909	370	555	156	1151	447	191	2418	2243	1631	735	795	1103	110	770	1530	2971	847	288	1736	84	603
	'32	408	164	52	3535	340	690	142	1185	427	41	1432	739	1224	341	857	472	97	916	1365	2983	732	110	1344	40	228
	'31	666	260	45	5306	600	1085	260	1885	396	141	2389	1814	2461	1553	1006	1061	192	1568	2049	4872	1129	114	1953	68	626
	'30	1159	459	66	9407	697	1223	348	2811	384	202	2987	1626	4785	1501	1212	1135	156	2047	2577	6028	1359	516	2500	95	1466

and Months from 1930 Through 1937

MONTHS		Nevada	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia	Washington	W. Virginia	Wisconsin	Wyoming	Dist. of Col.	TOTAL
January	'37	477	1063	8289	1103	30458	4991	804	17018	2640	2639	16808	2053	2308	1129	3770	10527	1051	488	4076	3123	2303	6852	729	2137	280685
	'36	573	616	6360	810	20403	7954	704	13690	3110	2496	10135	668	1530	1289	3459	11037	880	292	3258	3038	1686	4911	731	1800	215782
	'35	232	203	3780	529	9547	4042	398	12339	3127	1070	7789	499	1284	507	2466	9079	586	148	2523	1437	1196	2112	253	1330	136635
	'34	157	90	1747	211	6350	1400	177	4133	1438	531	3474	195	540	217	732	3390	229	74	943	857	504	994	178	564	61242
	'33	120	171	3047	256	11273	1502	164	4817	1547	362	4727	367	625	278	1293	4661	225	138	1209	895	763	1134	185	848	79845
	'32	89	261	4450	249	10760	1231	267	4407	1439	600	6325	319	644	290	1110	4119	264	167	2462	1163	728	2236	251	1136	87490
	'31	190	111	8059	563	10515	1616	547	6723	3029	1354	6407	312	1012	1133	1592	6099	306	140	1634	2302	924	2892	240	1207	126788
	'30	343	127	8067	517	11497	2837	701	10953	3933	963	9447	379	2956	1961	4819	13241	690	222	3954	3379	1493	4407	427	962	179096
February	'37	278	590	6885	577	18918	3060	376	16503	3075	2000	16969	1192	1983	584	1816	9590	964	310	2921	1664	5166	2308	811	1880	215049
	'36	297	444	3830	634	12622	2198	331	13316	4591	2483	9024	1107	1495	525	1715	11403	974	300	2388	2462	1410	3774	744	1409	176668
	'35	183	380	4914	522	12710	4104	527	11700	4052	1664	10621	689	1919	700	3586	10734	823	235	2965	1736	1688	3233	446	2022	170615
	'34	126	238	2595	285	7386	2226	288	7020	2573	777	6169	452	1042	256	1505	5998	329	95	1320	868	983	1547	213	828	94887
	'33	77	272	3192	154	9124	1099	112	4534	1665	367	5483	489	418	234	835	3280	147	130	1139	499	610	1004	175	949	69471
	'32	104	256	3892	144	9994	786	179	4873	1292	512	7239	602	384	369	781	2834	210	169	2188	654	640	2375	338	836	82799
	'31	132	438	5194	269	13034	1602	613	8339	1877	1133	8839	615	959	1074	1258	5293	499	206	3686	1390	1021	3334	348	1338	134133
	'30	412	358	7493	295	16680	2490	720	12936	6267	2644	12909	968	1416	1898	2898	12001	647	313	3537	2376	1653	4423	412	1300	211645
March	'37	368	1307	13638	515	33513	4646	1037	34977	4273	3945	27187	2085	2922	1181	5254	14326	1575	682	4644	6716	3096	9690	1143	3158	363738
	'36	511	886	11469	565	29036	3426	653	30305	5226	3583	19483	1953	1890	1029	7008	13669	1537	358	3781	5793	2882	8019	582	3791	301272
	'35	261	922	9599	441	23814	4002	950	16708	4747	2340	18514	1673	2241	1178	3716	13523	1171	455	3368	4496	2054	6747	813	2869	261477
	'34	214	691	6011	302	17520	2956	633	10951	3607	1351	10947	1207	1531	534	1909	11394	681	267	2014	2235	1406	3925	377	1612	173287
	'33	71	313	3428	122	10758	907	221	3919	1571	529	6969	546	531	222	447	4095	304	148	1343	878	550	1464	130	1051	78749
	'32	137	490	3860	88	12243	774	261	5088	957	512	8518	770	373	385	551	2977	350	282	1426	1192	668	2568	383	1123	92175
	'31	248	1121	8413	210	24836	2356	956	10542	2522	1382	14437	1531	1300	952	1915	7188	893	475	2924	2666	1464	5439	411	2478	200841
	'30	331	979	11061	1044	28541	3086	1186	15912	5737	2123	21808	2162	1398	1878	2863	11979	1210	679	4562	5289	2602	8903	501	2071	298824
April	'37	392	1731	13119	1253	35823	5995	1482	27541	5720	3915	34134	2392	2669	1358	5391	13714	1612	1170	6001	5555	4590	13513	725	3061	384951
	'36	523	1995	13729	1076	39260	4846	1516	26022	5667	4073	29012	2371	2088	975	3702	11354	1647	1248	5605	4090	11283	1154	6267	3700	397190
	'35	352	1628	10888	939	32364	6394	1729	21658	5934	2549	24775	2257	2312	1108	3834	12681	1091	972	5728	5205	2887	11297	654	3214	319652
	'34	182	1169	8345	675	22778	4922	1186	15076	4495	1285	19030	1650	2154	453	3011	11102	733	731	2716	2400	2531	4706	429	2126	222900
	'33	40	684	5499	330	18728	1601	377	7718	1027	743	9420	952	837	171	1532	5755	380	348	1298	1481	1084	2834	165	1240	119972
	'32	172	821	5008	229	19120	1427	524	7307	1639	740	9962	1097	657	410	1105	3737	281	538	1758	1281	1183	3064	206	1407	121089
	'31	235	1844	10729	558	34939	3249	1400	17736	2909	1851	19947	1988	1746	1190	3248	8549	887	1213	3878	2613	2674	6727	493	3008	265732
	'30	282	1971	11784	466	38251	3370	2446	24780	6714	3502	26398	2175	1677	2050	5166	12690	1626	1531	4856	5159	4210	9571	601	2319	357063
May	'37	638	1705	14696	992	40371	5301	1484	29071	5253	3801	34930	2610	2696	1889	4158	15511	1572	1100	5459	5235	3981	12178	925	3179	391697
	'36	543	1849	13015	988	39128	4321	1407	27088	4910	4177	38448	2467	2379	1647	3581	16199	1393	1415	5378	5643	4304	11330	1049	3668	392750
	'35	320	1401	10193	700	28507	4383	1750	18698	4502	2328	21698	1841	2111	1653	3499	13050	1063	1035	4675	2624	2059	9208	569	3323	293201
	'34	278	1173	7949	567	23511	3885	910	15547	3760	1420	18166	1494	2244	1169	2717	10934	596	850	4653	2230	1996	4833	457	2294	219225
	'33	162	1031	6707	280	22574	2141	305	11508	1984	942	12657	1368	1023	428	1960	6669	692	607	2522	1563	1503	3116	317	1662	160225
	'32	93	978	5722	193	20424	1459	611	8137	1921	661	11419	1026	624	536	1199	4318	321	743	1976	1198	1128	3103	181	1556	131261
	'31	246	1599	10554	431	31714	3403	1137	15161	2703	1837	20273	1887	1731	1151	2932	8622	675	1197	4811	2279	2542	7711	552	2918	247682
	'30	225	1938	11728	1115	40057	3315	1998	22146	5632	2564	27542	2183	1917	1862	4577	12383	1300	1673	5864	4082	4239	14493	588	2274	345041
June	'37	470	1516	12604	610	34358	4716	1261	26358	4794	4394	33789	2293	2671	1574	5036	13941	1797	1089	5175	6037	5242	8202	795	3304	360236
	'36	463	1608	11875	562	31912	4286	1644	26908	5892	4706	35974	2573	2337	1887	3918	14587	1844	1183	5469	5887	5790	11177	1249	4014	369423
	'35	410	1130	10631	472	27695	2994	1407	18184	3935	2569	21211	1510	1808	1663	3864	11170	1139	881	4302	2712	4001	8030	754	3180	280360
	'34	299	1119	7900	349	23141	3724	804	16746	3935	1533	19705	1606	1821	539	2703	12197	837	663	3021	2440	3829	5187	528	2654	223864
	'33	55	922	7278	210	21344	2349	713	11961	1604	1299	15270	1320	1291	766	1571	7884	655	516	2488	1769	1484	3403	366	1710	174219
	'32	140	874	7737	209	20084	1429	707	9329	1979	1010	14537	1103	766	417	1114	5483	400	700	2403	1290	1586	3602	229	1924	148751
	'31	241	1298	9626	232	26318	2336	889	12003	1934	1774	17938	1719	1512	974	2118	7686	720	828	4399	1260	2120	3906	473	2683	201911
	'30	183	1345	12206	478	24203	3189	1954	16083	4541	1816	25253	1648	1420	2106	3023	10785	1357	1210	4839	2536	3162	6764	424	2236	260942
July	'37	621	1200	13034	1534	37028	5455	1620	25025	5831	3392	31176	2218	2710	1316	3880	14859	1396	1050	4679	5007	3597	8210	884	2880	365767
	'36	472	1120	11140	1572	34732	6036	1625	22264	5674	4034	30444	1919	2386	1714	3805	16624	1485	864	5423	5379	4817	9359	978	3275	357490
	'35	554	1077	6701	1224	27000	6053	1974	18367	4385	2694	20556	1531	2039	1958	3769	12963	913	837	4075	3514	3346	8048	688	3178	285195
	'34	361	931	7653	1014	24021	4733	1124	15941	5769	1614	17347	1443	1922	973	3328	11300	820	539	3405	2692	3080	5011	516	2433	229006
	'33	298	712	6985	547	22397	3659	957	14123	3461	1295	13497	1433	1742	790	2569	8451	509	381	2213	1724	2014	3266	395	1534	185700
	'32	249	429	3916	340	16860	1778	455	5556	1469	601	7720	695	640	476	1414	4206	221	342	1932	1122	900	2312	184	1308	104188
	'31	325	1004	7287	461	26916	3740	598	10543	2358	1432	14231	1667	1657	853	2932	6777	561	592	3762	2911	2246	5206	483	2313	194571
	'30	557	1131	9128	904	35184	3517	1140	12774	6341	3037	17915	1742	1702	2141	4122	10628	954	795	4081	4383	3279	7385	512	2235	254077
August	'37	415	1021	10294	1072	27199	4741	989	22592	5346	3096	30819	1711	2574	1116	3763	13038	1418	919	4490	4598	3370	6504	774	2435	306958
	'36	806	814	7391	956	22062	4529	858	17959	4461	3181	23399	1349	2215	1566	3315	12490	1221	4582	697	4543	3032	6436	675	2525	262912
	'35	356	780	6653	724	19356	5003	1119	14144	5157	2307	18261	1218	2343	1304	3362	12033	1205	693	3883	3061	2104	6267	548	2446	233851
	'34	318	637	6136	681	18360	4304	749	13611	3524	1510	16693	1206	2020	834	3975	10564	715	574	3827	2588	2624	450[illegible]	497	1895	193198
	'33	159	664	5836	474	19951	3668	693	13691	3915	1234	16240	1378	2044	621	2269	9431	495	536	2503	2377	2352	3695	355	1[illegible]37	178935
	'32	74	360	4193	201	13462	1419	343	5405	1435	497	8038	665	614	389	1088	2953	143	391	1680	982	943	1840	174	1163	93457
	'31	265	628	6761	314	20125	2564	280	7271	1627	875	13837	1269	1369	730	1957	5585	250	670	3373	1713	1869	3306	307	1888	155207
	'30	369	799	8418	612	22849	2881	452	11418	4253	1514	17360	1385	1417	1297	2656	9594	430	815	3006	2943	2089	4199	364	1913	203863
September	'37	380	852	7037	498	19702	4038	875	13811	3765	2633	20630	1167	1966	817	2654	11137	973	540	3921	3500	2340	10160	577	1549	235683
	'36	363	871	5996	529	16366	3576	671	14069	3290	2520	16461	912	1892	880	2723	10116	1002	489	3675	3572	2318	5845	1857	523	208896
	'35	338	703	4065	429	12076	4384	738	8766	3686	1679	11155	742	1828	1116	2435	7858	814	469	3351	2498	1450	4125	431	1522	157098
	'34	171	718	4118	555	11602	4922	689	8912	3486	1223	10194	819	1744	714	2091	9783	668	384	2809	2152	1544	2984	338	1354	146931
	'33	122	848	5362	299	14373	2941	652	9432	4639	1134	13374	1096	1797	449	2397	8376	421	385	2578	2067	1850	3173	242	1306	157976
	'32	148	453	3393	132	10230	1200	285	4375	1804	369	6866	545	662	302	843	5253	236	294	1726	724	773	1596	119	893	81893
	'31	196	807	6236	197	14973	2093	448	6826	1185	825	10594	996	893	525	1295	4273	487	433	2662	1365	1215	3130	236	1802	124876
	'30	306	964	7439	406	16678	2416	1186	9349	3021	1270	13882	1039	1237	1336	2113	8364	855	628	3491	2610	1922	4757	270	1596	175358
October	'37	324	730	7516	1032	18631	4153	1122	13472	2973	2365	14821	1112	1704	746	2511	10222	703	560	3134	2932	1973	5481	532	1465	202898
	'36	215	599	5168	929	14312	3256	748	10797	2997	2100	12365	1020	1535	762	1959	9035	790	464	2956	2768	1721	3863	464	1633	171319
	'35	193	584	4574	634	13890	4755	986	8204	2603	1398	9346	747	1480	818	2086	8785	629	376	2778	2399	1376	2412	336	1405	148389
	'34	174	554	3880	598	11871	6974	657	8197	2912	1187	10116	746	1795	688	2992	7327	560	326	2820	2053	1401	2659	391	1321	140937
	'33	98	575	4640	510	12593	4776	647	8778	3781	1005	10359	929	1683	452	2352	10340	398	328	2311	1601	1627	1901	210	1237	136326
	'32	67	275	2201	204	7289	1701	191	3544	1437	355	5066	472	647	188	1081	3597	153	192	1285	635	666	903	114	812	63195
	'31	155	615	4279	231	13366	2111	280	5606	1389	702	8573	798	814	314	1734	3943	237	395	2665	879	1169	1467	152	1575	102939
	'30	184	689	6183	616	16543	2937	664	7484	3329	1229	11537	921	1614	962	2685	7217	505	485	2579	1856	1629	3507	290	1341	150264
November	'37	231	611	7593	816	20701	3263	693	13142	3800	1861	15077	1111	1519	667	2290	10672	785	515	3204	1909	2082	6279	453	1741	196469
	'36	217	830	8796	838	21454	4039	487	17438	4045	2697	15678	1392	1839	610	3431	13140	775	537	3388	2725	2226	6122	486	2297	223560
	'35	222	756	7695	831	21479	4596	715	15482	4198	2092	14794	1224	2297	813	3345	11621	731	578	3768	2083	2065	5922	363	2472	220262
	'34	104	482	2660	617	8598	3086	338	6352	2426	1014	6717	623	2055	559	1873	7068	468	256	2544	1142	1135	3117	306	794	107574
	'33	107	335	3124	301	8966	2328	317	5111	2608	647	7433	585	1983	282	1627	7120	302	203	1695	916	1016	2182	200	745	94180
	'32	36	201	1673	159	5349	912	114	2276	1014	331	3724	368	386	145	541	2666	120	155	1096	415	367	980	71	534	44349
	'31	92	362	3225	203	9379	1201	221	4024	1032	534	6568	585	592	251	1093	3195	122	274	1834	389	694	2265	111	1016	75321
	'30	117	390	3658	307	8988	1392	310	5264	2076	795	6845	599	855	593	1181	5155	371	268	1944	747	979	1537	129	868	93066
December	'37	173	635	7398	779	13255	4982	317	10682	4110	1874	17569	556	1237	351	1797	12556	512	376	3064	2779	1441	5000	620	1470	179621
	'36	272	626	12968	1367	27036	5897	451	25009	6742	4410	32858	1578	2434	672	3345	18341	850	566	4443	6381	2996	7450	1058	2818	327303
	'35	126	424	6356	866	14967	5280	319	16138	6490	3079	23216	879	1757	713	2485	15229	660	508	4397	4920	1857	5167	1315	2048	237194
	'34	73	109	2067	444	4197	2810	138	5959	1452	864	8607	394	1028	261	1091	5565	251	133	1300	1463	996	1537	283	648	75356
	'33	19	70	1400	233	3706	2220	105	5735	1112	566	6196	286	617	156	1028	4383	176	54	881	863	473	1151	205	436	58624
	'32	17	69	2293	186	2507	1164	22	4664	641	303	5926	296	414	94	869	2451	30	89	881	815	584	822	117	565	45683
	'31	68	106	2734	247	6121	1817	42	7106	1185	519	9222	466	736	202	1064	3939	94	136	1863	2279	993	1939	314	872	77563
	'30	154	113	973	363	6740	2338	104	9230	1354	654	8356	521	1013	299	1608	5878	256	153	2011	2555	1190	2197	316	932	96054

Who's Who

(Continued from Page 27)

John Frautschi, pur. agt. **Det. Rep.**—E. L. Edwards, 447 E. Fort st. **Adv. Agcy.**—Sterling Beeson, Inc., Second Natl. Bank Bldg., Toledo, O.

BURCH CORP., Crestline, O. Snow plows, road maintainers, conveyors, stone spreaders, chip spreaders, sand spreaders, cast iron culvert pipe and street castings. C. A. Stephan, chmn.; J. L. Morrow, pres., gen. mgr., sales mgr., adv. mgr.; C. A. Stephan, vice-pres.; E. G. Volk, secy.; G. J. Pennington, treas,; D. A. Nolder, engr.; C. J. Carlisle, pur. agt. **Det. Rep.**—Contractors Mchy. Co., 16425 Hamilton ave. **Adv. Agcy.**—Coleman Todd & Associates, Mansfield, O.

BURD PISTON RING CO. (Subsidiary company — Liberty Foundries Co.), Rockford, Ill. Piston rings, valve packing, hot water car heaters, auto fans and defrosters. F. M. White, pres.; A. A. Lundgren, vice-pres., sales mgr.; M. E. Wahlstrom, secy.-treas.; F. J. Erickson, pur. agt. **Adv. Agcy.**—Western Advertising Agency, Racine, Wis.

BURGESS-NORTON MFG. CO., 737 Peyton st., Geneva, Ill. Piston pins, clutch discs, plates, ball bearing assemblies, screw machine products, steel stampings. C. M. Burgess, pres.; F. E. Burgess, vice-pres.; C. F. Wohlhuter, secy.; C. M. Burgess, treas.; H. S. Smith, sales mgr., contract div.; C. B. Johnson, sales mgr., jobber div.; G. W. Waller, engr.; C. F. Wohlhuter, pur. agt.

BURROUGHS ADDING MACHINE CO., 6071 Second blvd., Detroit, Mich. Adding, billing, bookkeeping and statistical machines, cash registers, typewriters, correct posture chairs, carbon paper, roll paper, rubber cushion key tops and ribbons. Standish Backus, pres.; A. J. Doughty, vice-pres.; G. W. Evans, secy.; L. A. Farquhar, treas.; L. V. Britt, sales mgr.; W. C. Sproull, adv. mgr. **Det. Rep.**—Burroughs Adding Mach. Co., 6071 Second blvd. **Adv. Agcy.**—Campbell-Ewald Co., General Motors bldg., Detroit, Mich.

BUSSMANN MFG. CO., University at Jefferson, St. Louis, Mo. Fuses, fusetrons, fustats. A. B. Bussmann, pres.; H. T. Bussmann, vice-pres., sales mgr.; J. A. Bussmann, secy.-treas.; H. von P. Thomas, adv. mgr.; W. L. Lodge, engr.; Lee J. Bussmann, pur. agt.

BUTCHER & HART MFG. CO., 1130 Nebraska, ave., Toledo, O. Molybdenum steel lock washers and spring wire products, snap rings, retainer or spacer rings. Harold E. Butcher, pres.; Edison W. Hart, Wm. J. Heinauer, vice-pres.; Walter G. Kirkbride, secy.; H. E. Butcher, treas.; Cliff Waters, engr.; E. W. Hart, pur. agt. **Det. Rep.**—Jack H. Butcher, Toledo, O.

C

CADILLAC MOTOR CAR DIVISION, General Motors Corp., 2860 Clark ave., Detroit, Mich. Passenger cars. N Dreystadt, gen. mgr.; D. E. Ahrens, sales mgr.; F. J. Denney, adv. mgr.; E. W. Seaholm, engr.; D. F. Hulgrave, pur. agt.; W. B. Wardle, comptr.; R. L. Rickenbaugh, S. P. mgr.; V. A. Olsen, works mgr.; R. L. Newton, E. F. Upson, asst. gen. sales mgrs. **Adv. Agcy.**—MacManus, John & Adams, Inc., Fisher bldg., Detroit, Mich.

CAMBRIDGE INSTRUMENT CO., Inc., 3732 Grand Central Terminal, New York, N. Y. Precision mechanical and electrical instruments, exhaust gas analysers. R. H. Kruse, pres.; H. N. Packard, vice-pres.; W. H. Jefferson, secy.; H. N. Packard, treas.; R. H. Kruse, sales mgr.; J. O. Hutton, engr.; L. Birdsall, pur. agt. **Adv. Agcy.**—E. M. Freystadt Assoc., Lexington ave., New York, N. Y.

(See display advertising index)

CAMPBELL, A. S. CO., Inc., 161 Prescott st., East Boston, Mass. Bumper guards, grille guards, license plate frames, rear curtain window frames, windshield frames. A. S. Campbell, chmn., pres.; N. C. Raymond, vice-pres.; F. W. Wheeler, treas.; N. C. Raymond, gen. mgr.; G. H. Muller, sales mgr., adv. mgr.; R. E. Paddock, engr.; W. A. Sellon, pur. agt.; B. R. Warshaw, asst. treas. **Det. Rep.**—A. S. Campbell Co., Inc., 426 Fisher bldg.

CAMPBELL, WYANT & CANNON FDY. CO., Muskegon, Mich. Alloyed cast iron, molybdenum steel castings, cylinders, cylinder heads, camshafts, crankshafts, centrifugally cast cylinder sleeves. D. J. Campbell, pres.; G. W. Cannon, vice-pres., gen. mgr.; I. A. Wyant, secy.-treas.; F. B. Whitlock, sales mgr.; E. W. Beach, engr.; A. G. Nelson, pur. agt.; G. D. Branston, asst. secy. and asst. treas.

CANADA MOTOR PROD., Ltd., 66 Wellington st., W., Toronto, Ont. Starting, lighting, ignition replacement parts. I. M. Gringorten, sales mgr.; M. W. Gasner, pur. agt.

CANADIAN TOP & BODY CORP., Ltd., Louise st., Tilbury, Ont. Automobile bodies, house trailers. L. L. Odette, pres., treas., gen. sales mgr.; A. E. Underwood, vice-pres.; T. C. Odette, secy.; Chas. Walsh, engr.; E. J. F. Marnell, pur. agt.

CANEDY OTTO MFG. CO., East End ave. and Main st., Chicago Heights, Ill. Drill presses, arbor presses, surface plates, cranes. Chas. H. Thomas, pres.; R. D. Thomas, vice-pres.; J. E. Thomas, secy.-treas., pur. agt.; C. L. Hughes, sales mgr., adv. mgr.; A. J. Kowalski, engr.; Floyd Wilson, supt.

CARBOLOY CO., Inc., 2985 E. Jefferson ave., Detroit, Mich. Cemented carbide tools, cemented carbide drawing and

(Continued on Next Page)

NEW PASSENGER CAR REGISTRATIONS

Figures supplied by R. L. Polk & Co. with exception of New Jersey, supplied by New Jersey Motor List Co., and Metropolitan New York area which are compiled by Sherlock & Arnold

STATES		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP						
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	Buick	Cadillac	Chevrolet	LaSalle	Oldsmobile	Pontiac	Totals
Alabama	'37	382	406	2189	3936	6913	10217	141	10358	1174	59	11195	149	1097	1222	14896
	'36	242	172	2032	3778	6224	9032	122	9154	972	47	14652	111	839	1001	17622
Arizona	'37	457	335	940	1877	3609	2094	145	2239	758	33	3239	97	570	562	5259
	'36	223	276	1189	1894	3582	2489	70	2559	567	32	3602	33	510	408	5152
Arkansas	'37	359	209	1296	2849	4713	5709	131	5840	701	20	5705	86	608	967	8087
	'36	239	82	1173	2589	4083	5366	67	5433	472	27	7200	43	479	974	9195
California	'37	7230	7245	20443	31134	66052	38324	2574	40898	18316	1289	49120	3164	17115	17268	106272
	'36	5839	6067	23287	34234	69427	49922	1684	51606	14134	1357	56118	1676	16309	15039	104633
Colorado	'37	927	678	2274	4458	8337	6799	286	7085	1978	82	7429	234	1798	1535	13056
	'36	722	390	2413	5414	8939	7603	164	7767	1800	74	10193	89	1710	1526	15392
Connecticut	'37	1222	1500	4361	7108	14191	8300	324	8624	4019	304	8933	730	2799	3689	20474
	'36	835	853	3911	8756	14355	8989	207	9196	3378	330	10815	286	2951	3471	21231
Delaware	'37	253	125	503	1062	1943	1900	60	1960	746	65	2420	112	795	762	4900
	'36	118	70	245	1080	1513	1539	32	1571	630	68	2555	57	693	640	4643
Florida	'37	867	571	2411	5781	9630	10415	715	11130	2600	190	9611	558	2271	2040	17270
	'36	574	314	2148	5919	8955	9978	387	10365	1720	189	10152	254	1750	1579	15644
Georgia	'37	814	554	3081	6368	10817	13856	420	14276	2284	132	11786	377	2378	1912	18869
	'36	531	253	2317	6133	9234	12472	210	12682	1699	136	13106	191	1812	1378	18322
Idaho	'37	361	241	887	1751	3240	3406	131	3537	540	9	3733	29	637	517	5465
	'36	242	190	952	2107	3491	3234	92	3326	400	9	4368	18	537	570	5902
Illinois	'37	7022	6395	20646	32767	66830	52847	1909	54756	15359	971	47842	2339	14159	17012	97682
	'36	4329	3504	20181	35885	63899	47619	1107	48726	11434	1046	59434	1109	13947	12759	99729
Indiana	'37	2992	2827	8167	17587	31573	28424	628	29052	5696	218	27118	700	6970	7950	48652
	'36	1628	1505	7768	17907	28808	25191	355	25546	4005	228	33435	294	6135	5808	49905
Iowa	'37	1263	757	3583	8227	13830	18113	333	18446	2971	72	20276	224	2603	3683	29829
	'36	1061	628	4036	9754	15479	16701	237	16938	2120	72	25263	118	2816	3069	33458
Kansas	'37	1114	924	3170	7168	12376	13170	272	13442	2284	50	16584	182	2629	3333	25062
	'36	708	542	2850	7778	11878	12058	154	12212	1516	68	19423	76	1995	2575	25653
Kentucky	'37	1015	577	3237	5939	10768	10229	172	10401	1802	79	10502	252	1741	2069	16445
	'36	696	366	3044	6277	10383	8710	128	8838	1438	73	12943	116	1655	1802	18027
Louisiana	'37	702	325	2293	4630	7950	9950	292	10242	1330	57	9264	175	1379	1042	13247
	'36	465	213	2107	4817	7602	10333	240	10573	1115	81	13440	140	1342	1035	17153
Maine	'37	457	403	1385	2516	4761	3925	143	4068	1206	69	4339	197	1181	1659	8651
	'36	193	124	1263	2257	3837	3640	62	3702	994	81	4928	90	1139	1208	8440
Maryland	'37	1418	880	3291	6555	12144	9621	278	9899	2916	147	11406	408	2110	2804	19791
	'36	921	380	3148	7307	11756	9282	146	9428	2464	143	12543	169	1933	2351	19603
Massachusetts	'37	3057	2098	9701	15032	29888	22283	809	23092	7249	602	21866	1561	8686	7893	47857
	'36	1749	933	9411	17392	29485	24141	521	24662	6855	638	25808	773	9202	6871	50147
Michigan	'37	4163	4137	15206	27443	50949	72023	1807	73830	14936	482	49038	1787	11802	16373	94418
	'36	2677	2055	16720	25919	47371	66496	1358	67854	11574	636	56737	931	10929	12534	93341
Minnesota	'37	1993	1747	4955	11204	19899	22459	493	22952	3693	113	20148	324	3241	4600	32119
	'36	1316	1003	4445	12833	19597	18686	265	18951	2927	116	25821	153	3150	3873	36040
Mississippi	'37	271	197	955	2905	4328	7021	116	7137	892	12	7928	61	561	820	10274
	'36	178	85	1031	3478	4772	6783	80	6863	576	6	10860	31	442	614	12529
Missouri	'37	1618	1980	5812	12813	22223	20137	621	20758	4237	204	25331	588	4546	4778	39684
	'36	1126	921	5514	12264	19825	18967	296	19263	3040	221	30568	305	4304	4339	42777
Montana	'37	623	271	1023	2208	4125	3915	191	4106	887	12	4735	64	859	696	7253
	'36	508	202	1429	2871	5010	4688	133	4821	598	16	6040	36	793	562	8045
Nebraska	'37	699	447	1564	4267	6977	9173	251	9424	1532	28	9936	107	1394	1722	14719
	'36	531	260	1946	5581	8318	9423	157	9580	1292	24	13019	42	1438	1531	17346
Nevada	'37	183	150	310	623	1266	713	75	788	353	26	997	90	207	272	1945
	'36	108	112	389	754	1363	1039	51	1090	221	42	1151	40	255	283	1992
New Hampshire	'37	280	197	904	1646	3027	2484	89	2573	798	32	2890	102	928	808	5558
	'36	172	103	822	1659	2756	2596	60	2656	730	48	3134	33	911	634	5490
New Jersey	'37	3822	3253	11227	15238	33540	20077	861	20938	10300	674	21558	1513	7612	10190	51847
	'36	2393	1621	9914	16711	30639	18978	604	19582	8053	695	25229	721	7539	8115	50352
New Mexico	'37	335	166	758	1462	2721	2248	89	2337	667	13	3048	37	525	454	4744
	'36	208	82	564	1572	2426	2588	66	2654	464	14	3800	18	346	379	5021
New York	'37	11304	8227	30028	44313	93872	57641	2797	60438	28039	2214	57833	4677	22235	23167	138165
	'36	6248	6334	25960	44781	83323	56514	1730	58244	23343	2118	65595	2028	20252	16425	129761
North Carolina	'37	1161	553	2822	7552	12088	14325	361	14686	2326	86	17179	258	1967	2586	24402
	'36	754	393	2584	7983	11714	11876	170	12046	1568	87	17894	122	1613	1758	23042
North Dakota	'37	180	172	582	1376	2310	3974	83	4057	324	3	3649	33	407	419	4835
	'36	160	89	505	1346	2100	2991	57	3048	290	6	4250	11	303	312	5172
Ohio	'37	7224	6849	18174	33358	65605	57662	1447	59109	12746	632	50987	1710	11865	16983	94923
	'36	4355	3543	18216	37519	63633	55052	801	55853	9011	689	65020	838	12651	14312	102521
Oklahoma	'37	846	751	3000	5996	10593	13494	386	13880	2473	94	14192	279	2798	3389	23225
	'36	724	418	3026	6668	10836	14187	260	14447	2220	136	19539	171	2622	3162	27850
Oregon	'37	988	922	2404	4460	8774	7065	348	7413	1979	62	8260	210	1694	2201	14406
	'36	729	707	3008	5063	9507	8455	272	8727	1625	80	10714	170	1678	2013	16280
Pennsylvania	'37	11646	8175	24627	43943	88391	54014	1863	55877	17993	932	54128	2357	16201	17837	109448
	'36	6876	4232	23095	49748	83951	52112	1024	53136	15060	854	61713	1105	15519	14291	108542
Rhode Island	'37	680	514	1534	3378	6106	3495	162	3657	1164	101	3875	214	1441	1258	8053
	'36	434	352	1372	3812	5970	3410	86	3496	1074	118	4340	112	1290	989	7923
South Carolina	'37	415	263	1491	3458	5627	7429	130	7559	1000	26	8054	92	806	1091	11069
	'36	261	135	1342	3706	5444	6074	70	6144	722	28	8462	31	628	699	10570
South Dakota	'37	306	135	758	1576	2775	3633	77	3710	556	3	3635	29	480	549	5252
	'36	199	113	785	1920	3017	3349	38	3387	543	5	4533	11	527	517	6136
Tennessee	'37	811	657	3206	6443	11117	10561	223	10784	1658	75	10855	269	1831	1628	16316
	'36	575	301	3051	6514	10441	9994	140	10134	1357	91	13563	148	1448	1463	18070
Texas	'37	3276	1807	9660	20318	35061	38614	1109	39723	7511	342	38785	888	8075	6616	62217
	'36	2216	1030	7939	20789	31974	39384	664	40048	5614	413	55300	497	7017	5563	74404
Utah	'37	314	392	1121	1769	3596	3030	126	3156	676	15	3423	43	629	680	5466
	'36	203	328	1224	2079	3834	3140	101	3241	439	18	3731	22	611	435	5256
Vermont	'37	235	156	651	1156	2198	1696	41	1737	582	18	1952	110	458	556	3676
	'36	150	86	539	1349	2124	1733	33	1766	515	24	2169	38	465	466	3677
Virginia	'37	1000	889	3096	6876	11861	13463	328	13791	2335	82	14568	208	1787	2382	21363
	'36	657	537	3357	7792	12343	12783	173	12956	1732	73	16512	104	1678	2026	22125
Washington	'37	1198	1111	3260	6884	12453	9131	351	9482	2724	93	10878	333	3256	2924	20208
	'36	901	1030	3727	8000	13658	12069	271	12340	1851	109	13170	134	3040	2278	20582
West Virginia	'37	1045	802	2334	5407	9588	7365	194	7559	1627	67	9496	180	1670	1574	14614
	'36	685	634	2620	6594	10533	7399	91	7490	1200	62	11877	79	1622	1471	16311
*Wisconsin	'37	2012	1649	6793	11537	21991	21977	487	22464	4740	180	21119	431	5516	5762	37748
	'36	1156	1018	6185	12060	20419	18769	303	19072	3236	167	26088	205	5361	4755	39812
Wyoming	'37	231	145	657	1153	2186	2042	84	2126	538	3	2223	26	429	383	3602
	'36	173	105	787	1410	2475	2196	70	2266	407	9	2804	11	419	386	4036
District of Columbia	'37	853	657	2494	4761	8765	5490	289	5779	2089	162	4972	312	1556	1779	10870
	'36	710	397	2947	5527	9581	8524	158	8682	1692	162	6639	202	1883	1420	11998
*12 Months Total	'37	91624	74421	255264	462268	883577	765933	25242	791175	205304	11234	768040	28906	188302	212400	1414186
	'36	58698	45088	248518	499580	851884	74855	15567	764121	160687	11766	930250	13992	178488	171669	1466852

TWELVE MONTHS TOTAL, 1937-1936

*Wisconsin estimated for 1937.

STATES		HUDSON GROUP			AUBURN GROUP			NON-AFFILIATED GROUP								TOTALS
		Terra-plane	Hudson	Totals	Auburn	Cord	Totals	Graham	Hupp	Nash	Packard	Pierce-Arrow	Stude-baker	Willys	Miscel-laneous	
Alabama	'37	1063	99	1162		4	4	14		320	515		256	488	10	34936
	'36	1025	116	1141	13	9	22	47		249	323	2	285	128	1	35198
Arizona	'37	283	80	363		5	5	67	3	302	274		225	214	2	12562
	'36	316	117	433	7	8	15	108		270	234		316	76	13	12758
Arkansas	'37	229	48	277				40		213	201		241	171	10	19793
	'36	350	55	405		1	1	13		105	134	1	211	10	21	19612
California	'37	3083	1170	4253	4	194	198	1360	20	3698	6751	31	6964	9190	388	246075
	'36	3178	1612	4790	144	159	303	2082		3798	5500	88	8467	4981	580	256255
Colorado	'37	1056	222	1278	5	17	22	125	7	834	644	4	617	495	1	32505
	'36	1180	276	1456	36	7	43	154		664	507	22	599	112	66	35721
Connecticut	'37	1027	248	1275		22	22	566	7	1249	2699	5	1306	831	19	51268
	'36	1014	409	1423	63	32	95	626		948	1872	23	1288	117	168	51342
Delaware	'37	139	56	195		5	5	8		69	381		146	138	3	9748
	'36	173	45	218	1		1	1		45	357	2	114	5	7	8477
Florida	'37	1258	246	1504	2	48	50	206	2	471	1503	1	521	1026	131	43445
	'36	1228	293	1521	33	33	66	261		265	877	15	486	447	86	38988
Georgia	'37	1106	194	1300	2	12	14	74		697	1431	1	874	453	17	48823
	'36	854	189	1043	22	9	31	34		436	871		739	167	22	43581
Idaho	'37	570	121	691		6	6	82	1	285	176		492	164		14139
	'36	535	140	675	3	4	7	59		227	116		513	93	29	14438
Illinois	'37	4981	1043	6024	20	134	154	945	54	7921	7732	9	5387	2532	179	250205
	'36	5128	1371	6499	266	142	408	994		3985	5339	46	5348	226	939	236138
Indiana	'37	3283	580	3863	39	75	114	357	10	1978	1989	2	4034	2336	12	123972
	'36	3764	728	4492	215	107	322	580		950	1628	5	3583	309	152	116280
Iowa	'37	1463	305	1768	2	3	5	235	5	1293	836		1214	730	5	68196
	'36	1838	413	2251	12	12	24	344		953	664	1	1540	113	118	71883
Kansas	'37	1884	373	2257	4	7	11	119		937	685	2	916	504	4	56315
	'36	1653	433	2086	9	11	20	134		591	414	6	955	13	79	54041
Kentucky	'37	794	118	912		6	6	105	1	548	946	1	631	620	7	41391
	'36	826	176	1002	22	16	38	193		264	662	8	556	80	58	40109
Louisiana	'37	546	102	648		7	7	30	5	483	505	4	525	403	35	34084
	'36	453	116	569	4	8	12	35		429	380	14	590	81	33	37471
Maine	'37	577	141	718		5	5	113		496	572	1	433	230		20048
	'36	562	179	741	2	4	6	104		293	386	2	353	21	5	17890
Maryland	'37	887	192	1079		28	28	120	3	493	1521	4	774	507	8	46371
	'36	827	223	1050	10	16	26	65		391	995	22	844	22	26	44228
Massachusetts	'37	2115	575	2690		36	36	613	10	2909	4931	20	2347	1156	54	115603
	'36	2734	1009	3743	51	25	76	564		2105	3773	79	2122	86	419	117261
Michigan	'37	6429	1168	7597		27	27	900	76	3387	5694	1	1802	2455	20	241156
	'36	7591	1651	9242	46	57	103	1195		1409	3895	12	1680	347	519	226968
Minnesota	'37	1609	261	1870	2	5	7	267	9	1811	1418	1	1609	898	14	82874
	'36	1987	381	2368	28	16	44	381		1019	1203	6	1776	100	288	81773
Mississippi	'37	283	22	305		1	1	2		177	195		92	130	5	22646
	'36	328	41	369				5		125	137		177	26	3	25006
Missouri	'37	1294	270	1564	4	10	14	240		1202	1965	9	1364	909	33	89965
	'36	1280	340	1620	55	12	67	300		796	1489	28	1417	27	131	87740
Montana	'37	550	201	751	2	5	7	61	1	693	419		434	207	5	18062
	'36	1037	321	1358	11	5	16	87		519	252	3	554	35	45	20745
Nebraska	'37	531	108	639		7	7	39	1	458	486		525	361	4	33640
	'36	619	142	761	16	8	24	65		405	363	1	703	77	52	37695
Nevada	'37	100	43	143		1	1	40		222	162		141	59		4767
	'36	119	73	192	1	2	3	54		255	133		144	26	3	5255
New Hampshire	'37	318	75	393		1	1	83		369	422		299	231	5	12961
	'36	282	112	394	8	3	11	69		289	249	1	270	49	24	12258
New Jersey	'37	2285	631	2916	10	44	54	572	12	2705	5032	10	2697	1769	11	122103
	'36	1846	648	2494	90	44	134	469		1422	3732	50	2516	225	122	111737
New Mexico	'37	291	41	332		4	4	12		110	214		181	125	1	10781
	'36	326	51	377				5		64	143		167	15	9	10881
New York	'37	5366	1668	7034	3	160	163	1127	41	5855	13404	16	6298	3451	87	329951
	'36	5038	2088	7126	208	143	351	1266		4041	9542	102	5026	359	4182	303323
North Carolina	'37	1249	203	1452	1	13	14	65		489	1150	2	313	679	1	55341
	'36	902	216	1118	8	5	13	112		211	743		306	40	19	49364
North Dakota	'37	261	38	299		1	1	10		214	71		153	109	1	12060
	'36	257	47	304		1	1	50		156	48		173	28	15	11095
Ohio	'37	6501	1113	7614	11	33	44	1441	36	4882	6089	5	4898	5533	13	250192
	'36	7064	1525	8589	99	57	156	1495		2589	4360	32	4200	1125	312	244865
Oklahoma	'37	946	172	1118	10	16	26	82	2	530	787	3	779	554	1	51580
	'36	974	225	1199	39	28	67	130		452	535	17	802	123	147	56605
Oregon	'37	833	251	1084		8	8	481	9	1280	662	1	965	816	16	35915
	'36	1337	374	1711	15	6	21	609		1003	566	4	1317	609	106	40460
Pennsylvania	'37	7108	1300	8408	11	42	53	1557	7	7682	9844	13	8378	4074	177	293909
	'36	6468	1555	8023	116	70	186	1581		3819	7021	101	6090	320	511	273281
Rhode Island	'37	397	69	466		15	15	86	5	472	879	3	614	139	4	20499
	'36	503	121	624	6	13	19	70		320	527	8	278	7	67	19309
South Carolina	'37	942	88	1030	1	2	3	17		160	731		284	477	2	26959
	'36	822	85	907	7	1	8	9		54	439		325	105	15	24020
South Dakota	'37	182	30	212		2	2	14		280	163		205	115		12728
	'36	313	61	374	2	1	3	18		211	123		249	12	26	13556
Tennessee	'37	787	120	907		6	6	79	12	852	981	1	673	572	20	42320
	'36	853	129	982	6	5	11	98		475	622	1	758	328	39	41959
Texas	'37	3061	594	3655	2	51	53	213	17	1321	3284	4	3127	1369	49	150093
	'36	3531	704	4235	45	43	88	327		942	2187	34	3366	266	124	157995
Utah	'37	437	99	536	5	20	25	175	2	289	345		591	177		14358
	'36	459	144	603	19	8	27	273		307	247		520	71	19	14398
Vermont	'37	291	50	341				37		218	301		129	161	1	8799
	'36	283	90	373				20		121	216	2	87	19	8	8413
Virginia	'37	853	167	1020	1	13	14	104	1	411	1253	1	432	500	17	50768
	'36	782	188	970	19	4	23	190		295	858	10	495	33	48	50346
Washington	'37	1686	392	2078	2	19	21	354	18	1084	1086	2	1676	1202	35	49699
	'36	2128	621	2749	39	17	56	446		765	823	9	2106	833	91	54458
West Virginia	'37	711	143	854		1	1	225	2	464	923		747	699	3	35679
	'36	778	185	963	9	6	15	210		342	589	2	690	56	71	37272
*Wisconsin	'37	1876	384	2260	1	4	5	364		7469	1881	6	1992	1048	8	97241
	'36	2126	555	2681	17	13	30	440		3374	1635	7	1913	40	146	89569
Wyoming	'37	266	58	324	2	6	8	58	3	175	158		178	150		8968
	'36	340	86	426	7		7	40		136	91	2	193	14	7	9693
District of Columbia	'37	421	147	568		15	15	103	14	111	1172	3	575	261	23	28259
	'36	460	166	626	19	3	22	27		186	972	19	628	21	25	32787
*12 Months Total	'37	74208	15819	90027	146	1146	1292	13987	396	70568	95463	166	70054	51418	1441	3483752
	'36	78371	20825	99296	1848	1174	3022	16439		43070	68772	787	67835	12423	9996	3404497

Who's Who

(Continued from Previous Page)

sizing dies, Carboloy diamond-impregnated wheel dressers. W. G. Robbins, pres.; A. MacKenzie, vice-pres. in chge. of mfg.; K. R. Oberle, secy.-treas.; K. R. Beardslee, sales mgr.; E. C. Howell, adv. mgr.; James R. Longwell, chief engr.; A. W. Fillis, pur. agt.; Martin Muhling, fcty. supt.

CARBORUNDUM CO., Niagara Falls, N. Y. Grinding wheels, coated abrasives, waterproof sanding papers, brand cloth. F. J. Tone, pres.; Geo. Rayner, vice-pres.; A. Batts, secy.; F. H. Manley, treas.; H. P. Kirchner, wks. mgr.; C. Knupfer, sales mgr.; F. D. Bowman, adv. mgr.; L. J. Call, engr.; S. S. Diemer, pur. agt. **Det. Rep.**—C. J. Steuber, 2759 E. Grand blvd. **Adv. Agcy.**—Batten, Barton, Durstine & Osborn, Rand bldg., Buffalo, N. Y.

CARLILE & DOUGHTY, Inc., Washington & Cherry st., Conshohocken, Pa. Storage batteries, plates. L. A. Doughty, pres.; Ed. Booth, vice-pres.; F. S. Carlile, secy.-treas.; Harvey Plummer, sales mgr.; Chas. Dempwolf, engr. and pur. agt.

CARLTON LAMP CORP., 811 30th st., Union City, N. J. Auto lamp bulbs, radio panel lamp bulbs, indicator lamp bulbs. Frank A. Vosburg jr., pres.; Louis M. Spack, secy., sales mgr.; Frank V. Guarino, treas.; J. D. Collins, engr.

CARNEGIE - ILLINOIS STEEL CORP., Pittsburgh and Chicago. Controlled steels, carilloy steels, stainless and heat resisting steels, high tensile steels, automobile sheets. J. L. Perry, pres.; G. C. Kimbell, exec. vice-pres.; D. F. Austin, vice-pres. in chge. of sales; J. W. Hamilton, secy.; F. C. Harper, treas.; T. J. Hilliard, gen. mgr. of sales; G. R. Schreiner, adv. mgr.; C. R. Miller jr., pur. agt. Pittsburgh dist.; Frank J. Rief, pur. agt., Chicago dist. **Det. Rep.**—F. C. Hardie, 9-236 General Motors bldg. **Adv. Agcy.** Batten, Barton, Durstine & Osborn, Inc., 383 Madison ave., New York, N.Y.

CAROLINA MOTOR CLUB, 437 S. Tryon st., Charlotte, N. C. Alva M. Lumpkin, chmn.; Coleman W. Roberts, pres.; Lee A. Folger, Hon. R. R. Reynolds, John S. Cator, James O. Sheppard, W. W. Neal, Ernest Burwell, vice-pres.; J. H. Monte, secy., adv. mgr., pur. agt.; C. C. Armstrong, treas.; R. M. Harwell, gen. mgr., sales mgr.

CARPENTER, L. E. & CO., Inc., 444 Frelinghuysen ave., Newark, N. J. Lacrtex artificial leather. L. E. Carpenter, pres., gen. mgr., sales mgr.; Paul F. Corbin, vice-pres.; Courtland Palmer, secy.; George Lucas jr., treas. **Det. Rep.**—F. W. Vint, 245 W. Hildale ave.

CARTER, GEORGE R. CO., 630 Lycaste ave., Detroit, Mich. Automobile trim. A. E. Vogt, pres.; C. A. Lilley, vice-pres., gen. mgr., sales mgr.; L. S. Foulkes jr., secy.; R. A. Lander, treas.; T. M. Emery, mgr., pur. agt.; W. Bishop, engr.

CARTER CARBURETOR CORP., 2820 N. Spring ave., St. Louis, Mo. Carburetors, fuel filters. C. J. Hardy, pres.; H. H. C. Weed, vice-pres., gen. mgr.; H. C. Wick, secy.; L. A. Blackford, treas.; M. F. Peterson, asst. to gen. mgr.; V. J. Lowenstein, sales mgr.; C. W. Bolan, asst. adv. mgr.; G. M. Bicknell, chief engr.; W. J. Harris, pur. agt.; P. G. Sedley, mgr. parts and serv. div. **Det. Rep.**—Van C. Worden, 2-147 General Motors bldg. **Adv. Agcy.**—Oakleigh R. French, Inc., 4235 Lincell, St. Louis, Mo.

CASCO PRODUCTS CORP., 1333 Railroad ave., Bridgeport, Conn. Cigar lighters, fender guides, brake lever extension, speed warning indicators, generator regulators, steering wheel controls, gearshift knobs, fenderettes, defrosters, defrosting fans, heater switches, fog lite switches, grille guards, fender parking light, safety mirrors. Joseph H. Cohen, pres., treas., gen. mgr.; Bert G. Cochrane, vice-pres., sales mgr.; G. F. Bahr, vice-pres.; D. J. McCarthy, secy., adv. mgr.; E. F. Klein, asst. treas.; G. F. Bahr, engr.; G. H. Cote, pur. agt. **Det. Rep.** — R. W. Sinclair, 8-255 General Motors bldg. **Adv. Agcy.**—Steddiford Pitt Co., 153 Court st., New Haven, Conn.

CATALIN CORP., 1 Park ave., New York, N. Y. Cast phenolic resins, rods, sheets, tubes, special castings; phenolic resin glue for plywood and veneers; liquid resin for manufacturing translucent plastic of paper base. Wm. Theile chmn., pres.; H. Krehbiel, vice-pres., sales mgr.; Robert Frese, secy.-treas.; D. K. Bancroft, adv. mgr.; A. J. Beil, pur. agt. **Det. Rep.** — E. S. Horsman, 307 Stormfeltz-Lovely bldg. **Adv. Agcy.**—Walter J. Gallagher, 109 Prince st., New York, N. Y.

CATERPILLAR TRACTOR CO., Peoria, Ill. Diesel track-type tractors, diesel industrial engines, road machinery. C. L. Best, chmn.; B. C. Heacock, pres.; A. T. Brown, exec. vice-pres.; T. J. Connor, D. G. Sherwin, C. O. Wold, L. B. Neumuller, C. Parker Holt, O. L. Starr, J. V. Munro, vice-pres.; R. C. Force, chmn of exec. com.; E. Bornstein, secy.; D. A. Robison, treas.; E. R. Galvin, sales mgr.; G. M. Walker, adv. mgr.; H. S. Eberhard, engr.; E. J. Ellertson, pur. agt. **Det. Rep.**—Keller Tractor and Equipment Co., 5163 Martin ave. **Adv. Agcy.**—N. W. Ayer & Son, Philadelphia, Pa.

CELLULOID CORP., 10 E. 40 st., New York, N. Y. Plasticizer for pyroxylin

(Continued on Page 34)

New Passenger Car Sales by Makes in

	NEW ENGLAND						MIDDLE ATLANTIC			SOUTH ATLANTIC STATES									EAST NORTH CENTRAL					EAST SOUTH CENTRAL			
Standing	Maine	New Hampshire	Vermont	Massa-chusetts	Rhode Island	Connec-ticut	New York	New Jersey	Pennsyl-vania	Delaware	Maryland	District of Columbia	Virginia	West Virginia	North Carolina	South Carolina	Georgia	Florida	Ohio	Illinois	Indiana	Michigan	Wisconsin†	Kentucky	Tennessee	Alabama	Mississippi
1	Chev. 4339	Chev. 2890	Chev. 1952	Ford 22283	Chev. 3875	Chev. 8933	Chev. 57833	Chev. 21558	Chev. 54128	Chev. 2420	Chev. 11406	Ford 5490	Chev. 14568	Chev. 9496	Chev. 17179	Chev. 8054	Ford 13856	Ford 10415	Ford 57662	Ford 52847	Ford 28424	Ford 72023	Ford 21977	Chev. 10502	Chev. 10855	Chev. 11195	Chev. 7928
2	Ford 3925	Ford 2484	Ford 1696	Chev. 21866	Ford 3495	Ford 8300	Ford 57641	Ford 20077	Ford 54014	Ford 1900	Ford 9621	Chev. 4972	Ford 13463	Ford 7365	Ford 14325	Ford 7429	Chev. 11786	Chev. 9611	Chev. 50987	Chev. 47842	Chev. 27118	Chev. 49038	Chev. 21119	Ford 10229	Ford 10561	Ford 10217	Ford 7021
3	Plym. 2516	Plym. 1646	Plym. 1156	Plym. 15032	Plym. 3378	Plym. 7108	Plym. 44313	Plym. 15238	Plym. 43943	Plym. 1062	Plym. 6555	Plym. 4761	Plym. 6876	Plym. 5407	Plym. 7552	Plym. 3458	Plym. 6368	Plym. 5781	Plym. 33358	Plym. 32767	Plym. 17587	Plym. 27443	Plym. 11092	Plym. 5939	Plym. 6443	Plym. 3936	Plym. 2905
4	Dodge 1385	Olds. 928	Dodge 651	Dodge 9701	Dodge 1534	Dodge 4361	Dodge 30028	Dodge 11227	Dodge 24627	Olds. 795	Dodge 3291	Dodge 2494	Dodge 3096	Dodge 2334	Dodge 2822	Dodge 1491	Dodge 3081	Buick 2600	Dodge 18174	Dodge 20646	Dodge 8167	Pont. 16373	Nash 8056	Dodge 3237	Dodge 3206	Dodge 2189	Dodge 955
5	Pont. 1659	Dodge 904	Buick 582	Olds. 8686	Olds. 1441	Buick 4019	Buick 28039	Buick 10300	Buick 17993	Pont. 762	Buick 2916	Buick 2089	Pont. 2383	Olds. 1670	Pont. 2586	Pont. 1091	Olds. 2378	Dodge 2411	Pont. 16983	Pont. 17012	Pont. 7950	Dodge 15206	Dodge 6722	Pont. 2069	Olds. 1831	Pont. 1222	Buick 892
6	Buick 1206	Pont. 808	Pont. 556	Pont. 7893	Pont. 1258	Pont. 3689	Pont. 23167	Pont. 10190	Pont. 17837	Buick 746	Pont. 2804	Pont. 1779	Buick 2335	Buick 1627	Buick 2326	Buick 1000	Buick 2284	Olds. 2271	Buick 12746	Buick 15359	Olds. 6970	Buick 14936	Pont. 5840	Buick 1802	Buick 1658	Buick 1174	Pont. 820
7	Olds. 1181	Buick 798	Olds. 458	Buick 7249	Buick 1164	Olds. 2799	Olds. 22235	Olds. 7612	Olds. 16201	Dodge 503	Olds. 2110	Olds. 1556	Olds. 1787	Pont. 1574	Olds. 1967	Terra. 942	Pont. 1912	Pont. 2040	Olds. 11865	Olds. 14159	Buick 5696	Olds. 11802	Olds. 5471	Olds. 1741	Pont. 1628	Olds. 1097	Olds. 561
8	Terra. 577	Pack. 422	Pack. 301	Pack. 4931	Pack. 879	Pack. 2699	Pack. 13404	Pack. 5032	Chrys. 11646	Pack. 381	Pack. 1521	Pack. 1172	Pack. 1253	Chrys. 1045	Terra. 1249	Olds. 806	Pack. 1431	Pack. 1503	Chrys. 7224	Nash 7921	Stude. 4034	Terra. 6429	Buick 4466	Chrys. 1015	Pack. 981	Terra. 1063	Terra. 283
9	Pack. 572	Nash 369	Terra. 291	Chrys. 3057	Chrys. 680	DeSot. 1500	Chrys. 11304	Chrys. 3822	Pack. 9844	Chrys. 253	Chrys. 1418	Chrys. 853	Chrys. 1000	Pack. 923	Chrys. 1161	Pack. 731	Terra. 1106	Terra. 1258	DeSot. 6849	Pack. 7732	Terra. 3283	Pack. 5694	Stude. 2095	Pack. 946	Nash 852	Pack. 515	Chrys. 271
10	Nash 496	Terra. 318	Chrys. 235	Nash 2909	Stude. 614	Stude. 1306	DeSot. 8227	DeSot. 3253	Stude. 8378	Stude. 146	Terra. 887	DeSot. 657	DeSot. 889	DeSot. 802	Pack. 1150	Willys. 477	Stude. 874	Willys. 1026	Terra. 6501	Chrys. 7022	Chrys. 2992	Chrys. 4163	Terra. 2031	Terra. 794	Chrys. 811	Willys. 488	DeSot. 197
11	Chrys. 457	Stude. 299	Nash 218	Stude. 2347	DeSot. 514	Nash 1249	Stude. 6298	Nash 2705	DeSot. 8175	Terra. 139	DeSot. 880	Stude. 575	Terra. 853	Stude. 747	Willys. 679	Chrys. 415	Chrys. 814	Chrys. 867	Pack. 6089	DeSot. 6395	DeSot. 2827	DeSot. 4137	Chrys. 1998	Stude. 631	Terra. 787	DeSot. 406	Pack. 195
12	Stude. 433	Chrys. 280	Willys. 161	Terra. 2115	Nash 472	Chrys. 1222	Nash 5855	Stude. 2697	Nash 7682	Willys. 138	Stude. 774	Terra. 421	Willys. 600	Terra. 711	DeSot. 553	Stude. 284	Nash 697	Linc. 715	Willys. 5533	Stude. 5387	Willys. 2336	Nash 3387	Pack. 1864	Willys. 620	Stude. 673	Chrys. 382	Nash 177
13	DeSot. 403	Willys. 231	DeSot. 156	DeSot. 2098	Terra. 397	Terra. 1027	Terra. 5366	Terra. 2285	Terra. 7108	DeSot. 125	Willys. 507	LaSal. 312	Stude. 432	Willys. 699	Nash 489	DeSot. 263	DeSot. 554	DeSot. 571	Stude. 4898	Terra. 4981	Pack. 1989	Willys. 2455	DeSot. 1635	DeSot. 577	DeSot. 657	Nash 320	Willys. 130
14	Willys. 230	DeSot. 197	Stude. 129	LaSal. 1561	LaSal. 214	Willys. 831	LaSal. 4677	Willys. 1769	Willys. 4074	LaSal. 112	Nash 493	Linc. 289	Nash 411	Nash 464	Linc. 361	Nash 160	Willys. 453	LaSal. 558	Nash 4882	Willys. 2532	Nash 1978	Linc. 1807	Willys. 955	Nash 548	Willys. 572	Stude. 256	Linc. 116
15	LaSal. 197	LaSal. 102	LaSal. 110	Willys. 1156	Linc. 162	LaSal. 730	Willys. 3451	LaSal. 1513	LaSal. 2357	Nash 69	LaSal. 408	Willys. 261	Linc. 328	Grah. 225	Stude. 313	Linc. 130	Linc. 420	Stude. 521	LaSal. 1710	LaSal. 2339	LaSal. 700	Stude. 1802	Linc. 513	LaSal. 252	LaSal. 269	LaSal. 149	Stude. 92
16	Linc. 143	Linc. 89	Hud. 50	Linc. 809	Willys. 139	Grah. 566	Linc. 2797	Linc. 861	Linc. 1863	Cad. 65	Linc. 278	Cad. 162	LaSal. 208	Linc. 194	LaSal. 258	LaSal. 92	LaSal. 377	Nash 471	Linc. 1447	Linc. 1909	Linc. 628	LaSal. 1787	Hud. 421	Linc. 172	Linc. 223	Linc. 141	LaSal. 61
17	Hud. 141	Grah. 83	Linc. 41	Grah. 613	Cad. 101	Linc. 324	Cad. 2214	Cad. 674	Grah. 1557	Linc. 60	Hud. 192	Hud. 147	Hud. 167	LaSal. 180	Hud. 203	Hud. 88	Hud. 194	Hud. 246	Grah. 1441	Hud. 1043	Hud. 580	Hud. 1168	Grah. 412	Hud. 118	Hud. 120	Hud. 99	Hud. 22
18	Grah. 113	Hud. 75	Grah. 37	Cad. 602	Grah. 86	Cad. 304	Hud. 1668	Hud. 631	Hud. 1300	Hud. 56	Cad. 147	Nash 111	Grah. 104	Hud. 143	Cad. 86	Cad. 26	Cad. 132	Grah. 206	Hud. 1113	Cad. 971	Grah. 357	Grah. 900	LaSal. 340	Grah. 105	Grah. 79	Cad. 59	Cad. 12
19	Cad. 69	Cad. 32	Cad. 18	Hud. 575	Hud. 69	Hud. 248	Grah. 1127	Grah. 572	Cad. 932	Grah. 8	Grah. 120	Grah. 103	Cad. 82	Cad. 67	Grah. 65	Grah. 17	Grah. 74	Cad. 190	Cad. 632	Grah. 945	Cad. 218	Cad. 482	Cad. 151	Cad. 79	Cad. 75	Grah. 14	Grah. 2
20	Cord 5	Cord 1		Cord 36	Cord 15	Cord 22	Cord 160	Cord 44	Cord 42	Cord 5	Cord 28	Cord 15	Cord 13	Hupp 2	Cord 13	Cord 2	Cord 12	Cord 48	Hupp 36	Cord 134	Cord 75	Hupp 76	Pc. Ar. 12	Cord 6	Hupp 12	Cord 4	Cord 1
21	Pc. Ar. 1			Pc. Ar. 20	Hupp 5	Hupp 7	Hupp 41	Hupp 12	Pc. Ar. 13		Pc. Ar. 4	Hupp 14	Aub. 1*	Cord 1	Pc. Ar. 2	Aub. 1	Aub. 2	Hupp 2*	Cord 33	Hupp 54	Aub. 39	Cord 27	Cord 9	Hupp 1*	Cord 6		
22				Hupp 10	Pc. Ar. 3	Pc. Ar. 5	Pc. Ar. 16	Aub. 10*	Aub. 11		Hupp 3	Pc. Ar. 3	Hupp 1*		Aub. 1		Pc. Ar. 1	Aub. 2*	Aub. 11	Aub. 20	Hupp 10	Pc. Ar. 1	Aub. 1	Pc. Ar. 1*	Pc. Ar. 1		
23							Aub. 3	Pc. Ar. 10*	Hupp 7				Pc. Ar. 1*					Pc. Ar. 1	Pc. Ar. 5	Pc. Ar. 9	Pc. Ar. 2						
		Misc. 5	Misc. 1	Misc. 54	Misc. 4	Misc. 19	Misc. 87	Misc. 11	Misc. 177	Misc. 3	Misc. 8	Misc. 23	Misc. 17	Misc. 3	Misc. 1	Misc. 2	Misc. 17	Misc. 131	Misc. 13	Misc. 179	Misc. 12	Misc. 20	Misc. 61	Misc. 7	Misc. 20	Misc. 10	Misc. 5
Total	20048	12961	8799	115603	20499	51268	329951	122103	293909	9748	46371	28259	50768	35579	55341	26959	48823	43445	250192	250205	123972	241156	97241	41391	42320	34936	22646

*Tied. †Wisconsin, July-December, 1937, estimated by A. D. N.

Automotive Products Pay 73% of All Federal Excise Taxes

	1934	1935	1936	1937
Automobiles	$ 31,533,516	$ 42,262,453	$ 56,475,926	$ 64,721,887
Truck	5,261,207	6,674,270	8,044,343	8,811,651
Parts and Accessories	5,886,002	7,019,009	8,747,945	9,619,926
Rubber Tires, Tubes	24,704,077	28,102,446	38,241,552	40,088,004
Gasoline	170,109,269	172,263,481	186,321,448	203,059,174
Lubricating Oil*	14,657,658	17,003,162	16,521,762	17,514,427
Total automotive	**$252,151,729**	**$273,324,821**	**$314,352,976**	**$343,814,068**
Lubricating oil, non-automotive	$ 10,185,831	$ 11,815,756	$ 12,463,785	$ 16,167,164
Pipe Lines	10,008,692	9,256,287	10,423,608	12,304,203
Crude Petroleum Processed			859,758	933,581
Total	$272,346,252	$294,396,864	$338,100,127	$373,220,016
All manufacturers' excise taxes	$341,209,946	$381,644,814	$417,573,395	$472,472,574
Percent automotive to total	73.9%	71.6%	75.4%	72.7%

*Motor vehicles used 57.5 per cent of all lubricating oil and hence paid 57.5 per cent of lubricating oil excise taxes in 1933. In 1934 and 1935 motor vehicles used 59 per cent and in 1936, 56.8 per cent. Automotive share is shown in the above table.

Combined United States Exports of Passenger Cars and Chassis, Trucks, Buses and Chassis

	1936	1937	% of Incrs.
Units	285,756	395,196	38.3
Value	$157,878,620	$234,920,725	48.8

Total Men Employed On Highways

Total Men Employed on All Federal and State Highway Construction and Maintenance

Month	Fiscal Year 1937	Fiscal Year 1938
July	375,442	334,536
August	382,846	351,853
Sept.	340,073	346,444
Oct.	323,374	330,942
Nov.	290,523	314,067
Dec.	252,229	255,530
Jan.	202,884	196,858
Feb.	200,451	177,675
March	227,586	179,420
April	287,478	213,802
May	374,191	272,316
June	423,466	294,240
Total (man months)	**3,680,543**	**3,267,683**

Automobile Factory Employment, Payrolls, and Related Data

Auto, Body, and Parts Mfg. Industry in U. S. Only
U. S. Census Data, except as noted

	Industry Aggregates				Individual Factory Worker Averages			
	Vehicle Produced Number (000)	Vehicle Produced Wholesale Value1 (000,000)	Factory Worker Average Employment	Factory Worker Annual Payroll (000 Omitted)	Weekly Earnings2	Cost of Living3	Hourly Av'ge4	Av. Wh'lsl. Value per Vehicle
1925	4,266	$2,917	426,110	$713,931	$32.22	101.4	70¢	$684
1929	5,359	3,413	447,448	733,083	31.51	98.2	73	637
1931	2,390	1,374	285,515	350,526	23.61	85.3	....	575
1933	1,920	949	243,614	252,106	19.90	71.3	61	494
1935	3,947	2,089	445,000	588,000	25.41	77.6	74	529
1936	4,454	2,405	460,000*	676,000*	28.26	79.7	77	540
1937	5,016	4,377	517,000	806,000	30.00	83.0	88	592

1Compiled annually by Automobile Manufacturers' Assn.

2Annual payroll divided by 52 multiplied by average weekly employment in which full-time and part-time workers are counted alike.

3Special index prepared by U. S. Bureau of Labor Statistics for 14 automotive cities 1923-25 = 100.

4From U. S. Bureau of Labor Statistics; the 1925 and 1929 data come from special studies made in 1925 and 1928; the 1933, 1935, 1936 and 1937 figures are an average of the regular monthly reports in those years.

*From the March, 1937, Monthly Labor Information Bulletin of the U. S. Department of Labor.

States and Geographical Divisions in 1937

	WEST NORTH CENTRAL							WEST SOUTH CENTRAL				MOUNTAIN STATES								PACIFIC STATES		
Standing	Minnesota	Iowa	Missouri	North Dakota	South Dakota	Nebraska	Kansas	Arkansas	Louisiana	Oklahoma	Texas	Montana	Idaho	Wyoming	Colorado	New Mexico	Arizona	Utah	Nevada	Washington	Oregon	California
1	Ford 22459	Chev. 20276	Chev. 25331	Ford 3974	Chev. 3635	Chev. 9936	Chev. 16584	Ford 5709	Ford 9950	Chev. 14192	Chev. 38785	Chev. 4735	Chev. 3733	Chev. 2223	Chev. 7429	Chev. 3048	Chev. 3239	Chev. 3423	Chev. 997	Chev. 10878	Chev. 8260	Chev. 49120
2	Chev. 20148	Ford 18113	Ford 20137	Chev. 3649	Ford 3633	Ford 9173	Ford 13170	Chev. 5705	Chev. 9264	Ford 13494	Ford 38614	Ford 3915	Ford 3406	Ford 2042	Ford 6799	Ford 2248	Ford 2094	Ford 3030	Ford 713	Ford 9131	Ford 7065	Ford 38324
3	Plym. 11204	Plym. 8227	Plym. 12813	Plym. 1376	Plym. 1576	Plym. 4267	Plym. 7168	Plym. 2849	Plym. 4630	Plym. 5996	Plym. 20318	Plym. 2208	Plym. 1751	Plym. 1153	Plym. 4458	Plym. 1462	Plym. 1877	Plym. 1769	Plym. 623	Plym. 6884	Plym. 4460	Plym. 31134
4	Dodge 4955	Pontiac 3683	Dodge 5812	Dodge 582	Dodge 758	Pontiac 1722	Pontiac 3333	Dodge 1296	Dodge 2293	Pontiac 3389	Dodge 9660	Dodge 1023	Dodge 887	Dodge 657	Dodge 2274	Dodge 758	Dodge 940	Dodge 1121	Buick 353	Dodge 3260	Dodge 2404	Dodge 20443
5	Pontiac 4600	Dodge 3583	Pontiac 4778	Pontiac 419	Buick 556	Dodge 1564	Dodge 3170	Pontiac 967	Olds 1379	Dodge 3000	Olds 8075	Buick 887	Olds 637	Buick 538	Buick 1978	Buick 667	Buick 758	Pontiac 680	Dodge 310	Olds 3256	Pontiac 2201	Buick 18316
6	Buick 3693	Buick 2971	Olds 4546	Olds 407	Pontiac 549	Buick 1532	Olds 2629	Buick 701	Buick 1330	Olds 2798	Buick 7511	Olds 859	Terra. 570	Olds 429	Olds 1798	Olds 525	Olds 570	Buick 676	Pontiac 272	Pontiac 2924	Buick 1979	Pontiac 17268
7	Olds 3241	Olds 2603	Buick 4237	Buick 324	Olds 480	Olds 1394	Buick 2284	Olds 608	Pontiac 1042	Buick 2473	Pontiac 6616	Pontiac 696	Buick 540	Pontiac 383	Pontiac 1535	Pontiac 454	Pontiac 562	Olds 629	Nash 222	Buick 2724	Olds 1694	Olds 17115
8	Chrys. 1993	Terra. 1463	DeSoto 1980	Terra. 261	Chrys. 306	Chrys. 699	Terra. 1884	Chrys. 359	Chrys. 702	Terra. 946	Pack. 3284	Nash 693	Pontiac 517	Terra. 266	Terra. 1056	Chrys. 335	Chrys. 457	Stude. 591	Olds 207	Terra. 1686	Nash 1280	Willys. 9190
9	Nash 1811	Nash 1293	Pack. 1965	Nash 214	Nash 280	Terra. 531	Chrys. 1114	Stude. 241	Terra. 546	Chrys. 846	Chrys. 3276	Chrys. 623	Stude. 492	Chrys. 231	Chrys. 927	Terra. 291	DeSoto 335	Terra. 437	Chrys. 183	Stude. 1676	Chrys. 988	DeSoto 7245
10	DeSoto 1747	Chrys. 1263	Chrys. 1618	Chrys. 180	Stude. 205	Stude. 525	Nash 937	Terra. 229	Stude. 525	Pack. 787	Stude. 3127	Terra. 550	Chrys. 361	Stude. 178	Nash 834	Pack. 214	Nash 302	DeSoto 392	Pack. 162	Willys. 1202	Stude. 965	Chrys. 7230
11	Stude. 1609*	Stude. 1214	Stude. 1364	DeSoto 172	Terra. 182	Pack. 486	DeSoto 924	Nash 213	Pack. 505	Stude. 779	Terra. 3061	Stude. 434	Nash 285	Nash 175	DeSoto 678	Stude. 181	Terra. 283	Pack. 345	DeSoto 150	Chrys. 1198	DeSoto 922	Stude. 6964
12	Terra. 1609*	Pack. 836	Terra. 1294	Stude. 153	Pack. 163	Nash 458	Stude. 916	DeSoto 209	Nash 483	DeSoto 751	DeSoto 1807	Pack. 419	DeSoto 241	Pack. 158	Pack. 644	DeSoto 166	Pack. 274	Chrys. 314	Stude. 141	DeSoto 1111	Terra. 833	Pack. 6751
13	Pack. 1418	DeSoto 757	Nash 1202	Willys. 109	DeSoto 135	DeSoto 447	Pack. 685	Pack. 201	Willys. 403	Willys. 554	Willys. 1369	DeSoto 271	Pack. 176	Willys. 150	Stude. 617	Willys. 125	Stude. 225	Nash 289	Terra. 100	Pack. 1086	Willys. 816	Nash 3698
14	Willys. 898	Willys. 730	Willys. 909	Linc. 83	Willys. 115	Willys. 361	Willys. 504	Willys. 171	DeSoto 325	Nash 530	Nash 1321	Willys. 207	Willys. 164	DeSoto 145	Willys. 495	Nash 110	Willys. 214	Willys. 177	LaSal. 90	Nash 1084	Pack. 662	LaSal. 3164
15	Linc. 493	Linc. 333	Linc. 621	Pack. 71	Linc. 77	Linc. 251	Huds. 373	Linc. 131	Linc. 292	Linc. 386	Linc. 1109	Huds. 201	Linc. 131	Linc. 84	Linc. 286	Linc. 89	Linc. 145	Grah. 175	Linc. 75	Huds. 392	Grah. 481	Terra. 3083
16	LaSal. 324	Huds. 305	LaSal. 588	Huds. 38	Huds. 30	Huds. 108	Linc. 272	LaSal. 86	LaSal. 175	LaSal. 279	LaSal. 888	Linc. 191	Huds. 121	Huds. 58*	LaSal. 234	Huds. 41	LaSal. 97	Linc. 126	Willys. 59	Grah. 354	Linc. 348	Linc. 2574
17	Grah. 267	Grah. 235	Huds. 270	LaSal. 33	LaSal. 29	LaSal. 107	LaSal. 182	Huds. 48	Huds. 102	Huds. 172	Huds. 594	LaSal. 64	Grah. 82	Grah. 58*	Huds. 222	LaSal. 37	Huds. 80	Huds. 99	Huds. 43	Linc. 351	Huds. 251	Grah. 1360
18	Huds. 261	LaSal. 224	Grah. 240	Grah. 10	Grah. 14	Grah. 39	Grah. 119	Grah. 40	Cad. 57	Cad. 94	Cad. 342	Grah. 61	LaSal. 29	LaSal. 26	Grah. 125	Cad. 13	Grah. 67	LaSal. 43	Grah. 40	LaSal. 333	LaSal. 210	Cad. 1289
19	Cad. 113	Cad. 72	Cad. 204	Cad. 3	Cad. 3	Cad. 28	Cad. 50	Cad. 20	Grah. 30	Grah. 82	Grah. 213	Cad. 12	Cad. 9	Cord 6	Cad. 82	Grah. 12	Cad. 33	Cord 20	Cad. 26	Cad. 93	Cad. 62	Huds. 1170
20	Hupp 9	Hupp 5	Cord 10	Cord 1	Cord 2	Cord 7	Cord 7		Cord 7	Cord 16	Cord 51	Cord 5	Cord 6	Cad. 3*	Cord 17	Cord 4	Cord 5	Aubn. 5	Cord 1	Cord 19	Hupp 9	Cord 194
21	Cord 5	Cord 3	Pc. Ar. 9			Hupp 1	Aubn. 4		Hupp 5	Aubn. 10	Hupp 17	Aubn. 2	Hupp 1	Hupp 3*	Hupp 7		Hupp 3	Hupp 2		Hupp 18	Cord 8	Pc. Ar. 31
22	Aubn. 2	Aubn. 2	Aubn. 4				Pc. Ar. 2		Pc. Ar. 4	Pc. Ar. 3	Pc. Ar. 4	Hupp 1		Aubn. 2	Aubn. 5					Aubn. 2*	Pc. Ar. 1	Hupp 20
23	Pc. Ar. 1									Hupp 2	Aubn. 2				Pc. Ar. 4					Pc. Ar. 2*		Aubn. 4
	Misc. 14	Misc. 5	Misc. 33	Misc. 1		Misc. 4	Misc. 4	Misc. 10	Misc. 5	Misc. 1	Misc. 49	Misc. 5			Misc. 1	Misc. 1	Misc. 2			Misc. 35	Misc. 16	Misc. 388
Total	82874	68196	89965	12060	12728	33640	56315	19793	34084	51580	150093	18062	14139	8968	32505	10781	12562	14358	4767	49699	35915	246075

*Tied. †Wisconsin, July-December, 1937, estimated by A. D. N.

Special Truck Taxes Paid From 1927-1937

(Facts and Figures, Automobile Manufacturers Assn.)

Personal property taxes on trucks in operation, income and property taxes on garages, terminals, repair shops, and trucking companies are not included.

In Thousands of Dollars

	Registration Fees (State)	Gasoline Tax (State)	Federal Excise Taxes	Special City & County Taxes	Miscellaneous Taxes (State)	Total Special Taxes	Average Per Truck Registered
1927	$64,691	$ 75,108	.....	$ 6,000	$ 4,896	$150,695	$51.80
1928	69,400	87,161	.....	6,400	5,467	168,428	54.15
1929	72,823	108,506	.....	6,800	6,352	194,481	57.50
1930	78,789	138,055	.....	7,200	7,042	231,086	66.40
1931	76,616	144,756	.....	7,600	7,724	236,696	68.50
1932	74,046	139,376	$23,537	8,000	7,360	252,319	78.25
1933	68,659	142,287	61,936	8,750	8,525	290,157	90.31
1934	71,852	154,170	63,038	9,000	10,768	308,828	90.92
1935	78,598	161,743	68,331	10,000	11,228	329,900	90.50
1936	89,160	191,455	78,588	10,500	13,860	383,563	95.60
1937	95,115	208,783	85,112	11,000	17,500	417,510	98.10

Truck Production by Capacities, 1929-1937

(Compiled by Automobile Manufacturers Assn.)

UNITED STATES AND CANADA

	1929	1930	1931	1932	1933	1934	1935	1936	1937
¾ ton or less	141,859	144,869	109,220	79,127	98,920	172,089	249,957	316,208	395,157
1 ton and less than 1½	78,786	31,028	4,899	1,618	893	2,341	2,259	9,686	21,580
1½ ton and less than 2	523,691	370,541	289,418	144,113	228,238	376,475	420,597	423,503	44,156
2 ton and less than 2½	28,416	16,477	8,516	7,620	15,866	25,995	28,950	30,637	30,431
2½ ton and less than 3½	33,530	22,887	11,516	6,006	7,728	11,136	10,465	12,309	18,971
3½ ton and less than 5	8,643	6,412	4,532	2,689	2,859	4,752	3,612	4,621	6,170
5 ton	2,384	1,094	906	1,407	580	1,219	16,165	21,413	34,037
Over 5 ton and special types	9,508	6,683	5,169	2,705	3,356	5,390			
Total	826,817	599,991	434,176	245,285	358,440	599,397	732,005	818,377	947,502
¾ ton or less	17.1%	24.0%	25.2%	32.3%	27.6%	28.6%	34.1%	38.6%	41.7%
1 ton and less than 1½	9.5	5.2	1.1	.6	.2	.4	.3	1.1	2.3
1½ ton and less than 2	63.4	61.7	66.6	58.8	63.7	62.9	57.5	52.0	46.6
2 ton and less than 2½	3.4	2.7	2.0	3.1	4.4	4.3	4.0	3.7	3.2
2½ ton and less than 3½	4.1	3.8	2.7	2.4	2.2	1.9	1.4	1.5	2.0
3½ ton and less than 5	1.0	1.0	1.0	1.1	.8	.8	.5	.5	.6
5 ton	.3	.2	.2	.6	.2	.2	2.2	2.6	3.6
Over 5 ton and special types	1.2	1.4	1.2	1.1	.9	.9			
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Who's Who

(Continued from Page 31)

and resinous coating materials and plastics. Ingredient for high-pressure lubricants, plastic. Packaging materials. Celluloid sheets, rods, tubes. Lumarith sheets, rods, tubes and rolls. W. S. Landes, pres.; G. H. Richards, treas.; G. H. Boehmer, sales mgr.; R. D. Simmonds, engr.; D. M. Meeker, pur. agt. **Adv. Agcy.**—Aitkin-Lynett Co., 1400 S. Penn Sq., Philadelphia, Pa.

CELOLAC PRODUCTS CO., 110-112 S. 11th st., Minneapolis, Minn. Hardeners for automobile finishes, tar and road oil remover, polish. Dr. R. Alfred Moore (owner).

CENTRAL FDY. CO., 386 Fourth ave., New York, N. Y. Cast iron soil pipe and fittings, oil and gasoline separator, central drain traps, service, roadway and valve boxes. David Ford, chmn.; G. A. Harder, pres.; J. J. Crotty, vice-pres.; B. L. Flynn, secy.; F. E. Seeley, treas.; A. Hansen, gen. mgr. of plants; R. F. Garcia, sales mgr.; C. W. Stackhouse, adv. mgr.; W. E. Burgess, engr.; G. G. Cassidy, pur. agt. **Det. Rep.**—B. T. Neal, 200 Fallis rd., Columbus, O.

CHAIN BELT CO., 1600 W. Bruce st., Milwaukee, Wis. Rex chains, transmission equipment, bulk, assembly and belt conveyors, spray nozzles. C. R. Messinger, pres.; J. C. Merwin, B. Welser, J. T. Brown, G. K. Viall, vice-pres.; A. R. Abelt, secy., sales mgr.; C. L. Pfeifer, treas.; L. B. McKnight, sales mgr.; B. F. Devine, sales mgr.; G. H. Pfeifer, adv. mgr.; M. G. Jewett, engr.; F. G. Syburg, pur. agt. **Det. Rep.**—Chain Belt Co., 5169 Martin ave. **Adv. Agcy.**—Buchen Co., Chicago, Ill.

CHAMPION ANTI-RATTLER CO., Inc., 6191 Maple ave., St. Louis, Mo. Replacement parts, hydraulic brake replacement parts and fluid. Edw. H. Mohme, pres., gen. mgr., sales mgr.; Fremont P. Mohme, vice-pres.; J. G. Meiners, vice-pres.; pur. agt.; E. L. Wylie, secy.-treas.; Jos. Maxwell, adv. mgr. **Adv. Agcy.**—Beecher Adv. Co., 1706 Olive st., St. Louis, Mo.

CHAMPION FDY. & MACH. CO., 3018 W. 21st Pl., Chicago, Ill. Foundry molding machines, foundry riddles—electric, patterns, aluminum castings. T. J. Magnuson, pres.; H. O. Magnuson, secy.-treas.

CHAMPION PNEUMATIC MACHY CO., 8164 South Chicago ave., Chicago, Ill. Air compressors, car washers, tire inflation equipment. Geo. T. Rayfield, pres., gen. mgr., pur. agt.; Samuel Schlosser, vice-pres.; C. H. Lee, secy., sales mgr.; F. J. Rayfield, treas., engr. **Det. Rep.**—M. J. Vierling, 5427 Grand River ave. **Adv. Agcy.**—Van Auken-Ragland, Inc., 20 N. Wacker dr., Chicago, Ill.

CHAMPION SPARK PLUG CO., Upton ave., Toledo, O. Spark plugs. R. A. Stranahan, pres.; M. C. Dewitt, vice-pres., adv. mgr.; H. B. Speyer, secy.; F. D. Stranahan, treas.; Duane Stranahan, asst. treas.; R. H. Rowland, sales mgr.; J. F. Barr, pur. agt. **Det. Rep.**—J. B. Funk, 620 Fisher bldg. **Adv. Agcy.**—MacManus, John & Adams, Inc., Fisher bldg., Detroit, Mich.

CHANCE, A. B. CO., N. Allen st., Centralia, Mo. Piston rings, piston skirt expanders. A. B. Chance, pres.; F. G. Chance, vice-pres.; Miss I. L. Traughber, secy.-treas.; O. E. Walker, plant mgr.; F. G. Chance, gen. mgr.; J. T. Isbell, sales mgr.; H. A. Houston, adv. mgr.; W. L. Hollander, engr.; N. A. Toalson, pur. agt. **Adv. Agcy.**—Oakleigh French, St. Louis, Mo.

CHASE BRASS & COPPER CO., Inc., 236 Grand st., Waterbury, Conn. Automobile copper tube, rivets, cotter pins, escutcheon brass pins, automobile fittings, bolts and nuts, tacks. F. S. Chase, pres.; C. E. Hart jr., exec. vice-pres.; R. L. Coe, R. D. Ely, vice-pres.; S. S. Jackson, secy.; J. H. Gilbert, treas.; R. D. Ely, gen. mgr.; R. L. Coe, sales mgr.; Rodney Chase, adv. mgr.; A. G. Evans, pur. agt. **Det. Rep.**—Chase Brass & Copper Co., 14480 Woodrow Wilson ave. **Adv. Agcy.**—Fuller & Smith & Ross, Inc., 444 Madison ave., New York, N. Y.

CHASE, L. C. CO., Inc., 295 Fifth ave., New York, N. Y. Upholstery, mohair velvet, artificial leather, rubber type upholstery, trunk lining. W. H. Marland, pres.; E. E. Hussey, vice-pres.; T. M. Goodall, clerk, secy.-treas.; G. B. Ogan, gen. mgr.; C. R. Warren, sales mgr.; C. E. Grant, pur. agt.; E. J. Leach, R. H. Bogert, A. J. Freiheit, E. R. Campbell, H. J. Ross. **Det. Rep.**—A. E. Roninger, J. L. Gibson, 413 New Center bldg. **Adv. Agcy.**—Lawrence C. Gumbinner, 9 E. 41st st., New York City.

CHEK CHART CORP., 624 S. Michigan ave., Chicago, Ill. Lubrication guides, Accessory Blue Book. Service Man's Guide to Automotive Lubrication, wall charts, visual merchandiser. Raymond Shaw, pres.; J. Howard Pile, vice-pres.; J. S. Keller, sales direc.; C. S. Brophy, gen. mgr.; H. Eldridge, sales mgr. **Det. Rep.**—Walter Blaine, General Motors bldg. **Adv. Agcy.**—Rogers Gano, Chicago, Ill.

CHEMICAL PRODUCTS, Inc., 289 S. Harbaugh ave., Detroit, Mich. Latex adhesives, vulcanized rubber coatings, sound deadening adhesives, acid metal cleaners. Thos. W. Halloran, pres., treas.; G. E. Halloran, secy.

(Continued on Next Page)

Figures by R. L. Polk & Co., New Jersey Motor List Co., and Sherlock & Arnold

New Passenger Car Registrations By Makes

MONTHS		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP							HUDSON GR'P		
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	Buick	Cadillac	Chevrolet	LaSalle	Oldsmobile	Pontiac	Totals	Terraplane	Hudson	Totals
January	'37	6544	5075	21972	43438	77029	67188	1773	68961	15207	1150	56130	2224	15198	16191	106100	¶	8548	8548
	'36	3666	2325	15240	29922	51153	50744	801	51545	9169	856	62999	714	11552	9377	94667	4661	1752	6413
	'35	1924	1261	8978	24873	37036	46306	115	46421	4240	297	26549	369	4453	5864	41772	3010	1317	4327
	'34	450	500	3960	9679	14589	25828	112	25940	2738	183	7223	69	557	2363	13133	797	122	919
	'33	1196	1371	3518	11669	17754	13097	211	13308	3816	309	29935	293	1039	4342	39734	1491	240	1731
	'32	1546	1105	2676	4801	10128	13556	224	13780	6429	574	34516	335	2188	3958	48000	1989	823	2812
	'31	2402	1287	3815	2376	9880	36958	216	37174	6716	917	41073	472	2363	5092	56633	3366	1865	5231
	'30	3485	2584	5046	3182	14297	70257	331	70588	7792	580	42689	794	3326	6525	61706	5391	2325	7716
February	'37	5921	4927	20866	39611	71325	61832	1700	63532	6122	565	29661	884	6792	8735	52759	¶	7390	7390
	'36	2785	1763	11105	23577	39230	43724	699	44423	6651	637	53327	568	9363	7848	78394	3727	1236	4963
	'35	2646	1458	11352	26886	42342	64957	113	65070	3651	316	29536	404	9220	8737	51864	3269	1264	4533
	'34	255	284	5990	16684	23213	28810	137	28947	3205	382	24851	32	1749	4206	34425	1805	767	2572
	'33	1503	1181	3232	8265	14181	10629	111	10740	3047	288	25802	177	2146	4807	36267	1416	250	1666
	'32	3026	2224	3101	4372	12723	9572	295	9867	4856	847	28528	416	2949	4873	42469	2710	1175	3886
	'31	2243	1443	4314	2104	10104	39668	250	39918	6388	755	41564	418	3872	6101	59098	3264	1674	4938
	'30	3173	3104	5397	2570	14044	88916	272	89188	7284	468	53753	780	4346	7930	74561	6231	2875	9106
March	'37	9229	8005	28732	50601	96567	85850	2512	88362	16784	1015	77502	2932	18482	19828	136543	¶	10131	10131
	'36	5006	3270	21180	41186	70642	69271	1016	70287	13100	1027	87574	1040	17633	14559	134933	6324	1920	8244
	'35	4283	2583	17506	34615	58987	94986	142	95128	5393	433	55733	500	14755	13449	90263	4589	1844	6433
	'34	1879	866	9657	30918	43320	46200	178	46378	4962	516	50796	153	4602	7259	68288	4153	2223	6376
	'33	1611	1320	3541	9894	16366	15830	119	15949	2951	326	26626	213	2401	5212	37729	1581	247	1828
	'32	3591	3774	3324	5605	16294	7885	350	8235	6361	1033	29935	454	3031	4947	45761	2715	1203	3918
	'31	5300	2660	6195	3008	17163	60625	363	60988	9408	1117	61062	720	6058	9554	87919	5064	2331	7395
	'30	5800	4457	7466	4119	21842	122957	437	123394	10619	831	73585	1203	6564	11669	104471	8953	4098	13081
April	'37	7737	6244	19607	32195	65783	98414	2996	101410	23222	1410	95022	3365	23525	24773	171317	¶	7933	7933
	'36	6652	4286	28395	55679	95012	86302	1400	87702	18956	1310	111853	1448	24682	20122	178371	9888	2809	12697
	'35	5204	3084	20302	42707	71297	105479	192	105671	6952	541	75083	1379	17661	16038	117654	6156	2544	8700
	'34	3529	1381	11527	34295	50711	61986	236	62222	6459	672	63501	782	8916	9612	89936	5810	3169	8979
	'33	2282	1574	5841	15327	25024	25634	243	25877	4413	426	40407	318	3312	7905	56781	2570	316	2886
	'32	3830	3854	3596	14163	25443	6307	345	6625	7408	884	45712	471	3406	7340	65221	3181	1338	4519
	'31	7745	3649	7773	4395	23562	81456	490	81946	12588	1614	80743	968	7487	12981	116381	7070	2907	9977
	'30	8235	4822	9375	6262	28694	146112	623	146735	14358	1317	83372	1591	7501	14089	122228	9864	4482	14346
May	'37	9390	7825	27183	49242	93640	94007	2795	96802	21851	1466	83222	3309	22308	24246	156402	¶	9293	9293
	'36	6603	4655	27832	55637	94727	85209	1367	86576	17950	1209	109598	1394	23956	20406	174513	9535	2611	12146
	'35	5217	2957	20092	43713	71979	93467	213	93680	7082	549	59209	1593	17930	16058	102421	6113	2486	8599
	'34	3713	1457	9058	33291	47519	68051	223	68274	5310	683	57795	962	9331	9237	83318	5447	2703	8150
	'33	2698	1872	8057	24986	37613	32402	256	32658	5449	472	52442	395	4383	10230	73371	3789	354	4143
	'32	3124	3251	3136	17325	26836	23556	365	23921	5790	659	43500	394	3118	6508	59969	2591	1135	3726
	'31	7870	3431	7073	3985	22359	74066	443	74509	10835	1294	78668	920	6356	12594	110667	6047	2416	8463
	'30	8752	4346	8843	9243	31184	143535	541	144076	14210	1344	79775	1583	6865	11795	115572	8493	4136	12629
June	'37	9181	7555	26207	48461	91404	85113	2373	87486	21172	1131	70353	2957	21039	22705	139357	¶	9894	9894
	'36	5915	5280	26841	54009	92045	80527	1243	81770	16174	1035	102949	1097	21556	19537	162348	8802	1987	10789
	'35	4778	2917	18693	40263	66651	83273	159	83432	6758	529	66054	1403	16421	14978	106143	5704	2192	7896
	'34	3228	1146	9220	34118	47712	64405	175	64580	8309	499	64580	762	9190	9031	92371	4663	1998	6661
	'33	3347	2067	9611	29451	44476	34351	242	34593	5601	441	55806	452	4487	10685	76972	4736	372	5108
	'32	2972	3090	2894	11039	19995	53322	300	53622	5042	494	37068	362	1870	5047	49883	2190	898	3088
	'31	6593	3364	5593	3896	19446	58027	393	58420	8686	1136	65798	703	4944	9602	90869	4787	1890	6677
	'30	6951	3794	6301	8368	25414	112749	369	113118	8551	1036	58107	1023	4829	7677	81223	5320	2635	7955
July	'37	8876	7712	27099	49661	93348	85130	2321	87451	20997	969	75468	3060	20702	23354	144550	¶	9452	9452
	'36	5725	5462	25838	51764	88789	81703	1322	83025	15482	1018	99678	1024	19602	18693	155497	8407	1849	10256
	'35	4542	3057	18951	40674	67224	83203	129	83332	6700	457	71226	1101	15632	15208	110324	5454	2081	7535
	'34	3257	1372	10031	38289	52949	63205	160	63365	7951	400	67026	593	9197	8618	93785	4209	1930	6139
	'33	4101	2496	11244	31895	49736	38354	215	38569	5064	383	59420	442	4438	11210	80957	4688	331	5019
	'32	1999	1865	1812	11039	16715	40047	203	40250	2997	314	25185	215	1186	3219	33116	1499	553	2052
	'31	5892	3350	5340	14599	29181	50349	349	50698	7965	995	58581	657	4748	8736	81682	3840	1825	5665
	'30	6160	3640	5764	8089	23653	109372	352	109724	8981	1055	56129	822	4657	7060	78704	4650	2420	7070
August	'37	8408	7435	24019	43730	83592	54751	2206	56957	18344	998	71211	2742	17563	20916	131774	¶	8330	8330
	'36	4259	3753	19816	38745	66573	59582	1056	60638	11378	913	74496	853	13047	12936	113623	5871	1335	7206
	'35	3443	2468	14888	32147	52946	61590	133	61723	4717	314	68281	1056	11839	11906	98113	4583	1600	6183
	'34	2922	1335	8420	33107	45784	54112	203	54315	5808	309	55507	446	8524	6602	77196	3646	1692	5338
	'33	4058	2880	11244	32044	50226	39210	179	39389	4588	357	55713	377	4047	9528	74610	4788	250	5038
	'32	1794	1836	1607	9490	14727	31023	250	31273	2757	322	23875	256	1604	3034	31848	3784	435	4219
	'31	4521	2714	4203	19134	30572	38835	267	39102	6491	705	44058	458	3648	6298	61658	2755	1252	4007
	'30	5331	2432	3928	6836	18527	74476	246	74722	16316	817	46807	661	3014	6706	74321	3706	2143	5849
September	'37	7000	5596	16981	31255	60832	50136	1784	51920	11752	657	57579	1861	11694	14951	98494	¶	5528	5528
	'36	3216	2712	15257	29326	50511	54726	1122	55848	5454	795	55946	879	8837	9335	81246	4257	1003	5260
	'35	2284	1761	7413	17737	29195	43775	100	43875	4479	290	48994	740	6089	7427	68019	2782	1061	3843
	'34	2195	934	5894	24451	33574	41929	171	42100	4566	271	43003	370	6313	4697	59220	2642	1247	3889
	'33	3357	2578	10422	29565	45922	33525	176	33701	3765	304	49392	351	3541	7886	65239	4631	175	4806
	'32	1518	1642	1375	7592	12127	26432	243	26675	2453	353	21659	274	1702	2910	29351	3224	326	3550
	'31	3731	2063	3035	16881	25710	30849	219	31068	5265	665	33324	429	2521	5204	47408	2072	1064	3136
	'30	4521	1887	3024	6020	15452	65578	377	65955	13288	1383	39023	1017	2423	6670	63804	3278	1945	5223
October	'37	6973	4867	16981	24395	53216	36142	1343	37485	16038	613	46477	2136	10854	13817	89935	¶	4275	4275
	'36	2550	2417	14776	30332	50075	45710	1778	47488	8688	613	28241	503	3942	6757	48744	3421	957	4378
	'35	1535	1647	7719	16518	27419	38311	106	38417	12760	781	34869	1038	7807	8037	65292	2179	1030	3209
	'34	2844	968	6919	22247	32978	38652	183	38835	5167	330	38084	374	6342	4895	55192	3293	1526	4819
	'33	2531	2005	8563	25454	38553	29047	162	29209	2639	286	44055	332	2824	6976	57112	3299	194	3493
	'32	1220	1203	1317	4505	8245	20410	228	20638	2382	345	15772	279	1603	2748	23129	2225	306	2531
	'31	2801	1794	2335	11573	18503	23987	187	24174	4649	787	29792	501	1892	4026	41647	1822	734	2556
	'30	4045	1780	3933	4882	14640	55418	408	55826	10199	1471	33383	889	2026	4838	52806	2818	1255	4073
November	'37	6792	5204	14817	26913	53726	15512	1422	16934	18609	622	59104	1928	10724	12912	103899	¶	4966	4966
	'36	4809	3541	18505	42726	69581	27694	1696	29390	16200	968	63094	1433	4591	12694	98980	5381	1453	6834
	'35	1128	1350	15897	30321	48696	56578	180	56758	12612	1055	57379	1173	13356	11409	96984	3962	1859	5821
	'34	2432	720	5495	13475	22122	23284	186	23470	4741	395	36799	360	4809	3981	51085	2195	1028	3223
	'33	1330	1206	6445	19000	27981	20779	87	20866	1684	191	25602	254	1817	4456	34004	1843	139	1982
	'32	774	786	1149	6087	8796	14478	218	14696	1539	275	8344	222	894	1988	13262	1372	229	1601
	'31	1953	1428	1736	7290	12407	17544	168	17712	4916	667	20795	381	1300	3143	31202	1316	643	1959
	'30	2522	1317	2767	2791	9397	33084	254	33338	5809	1032	20669	495	1249	2686	31940	1957	822	2779
December	'37	5571	3979	10794	22766	43110	31858	2018	33876	15199	635	46311	1511	9425	9975	83056	¶	4303	4303
	'36	7512	5624	23733	46677	83546	63367	2067	65434	21485	1385	80552	3039	19727	19405	145593	8197	1913	10110
	'35	3552	2409	16979	32531	55471	54594	792	55386	12291	1130	63785	1019	14212	11011	103448	6037	2309	8346
	'34	1348	484	3968	11903	17703	14066	97	14133	3857	259	25741	279	2146	2144	34426	1850	902	2752
	'33	669	714	4363	12176	17922	18340	111	18451	799	120	10003	105	866	2132	14025	1010	79	1089
	'32	622	682	2120	10240	13664	12324	161	12485	1692	168	8753	170	576	1353	12712	1294	213	1507
	'31	1593	1246	1674	5035	9548	16174	120	16294	6964	483	27929	256	1490	2808	39930	1140	587	1727
	'30	1933	1104	2311	1943	7291	29651	146	29797	5238	744	31609	404	892	2394	41281	2677	1330	4007

*Includes Cord. †Includes Rockne. ‡Includes Hupp, Pierce-Arrow, Reo.

and Months from 1930 Through 1937

MONTHS		NASH GROUP			NON-AFFILIATED MANUFACTURERS												
		LaFayette	Nash	Totals	*Auburn	Austin	Continental	Franklin	Graham	Hupp	Packard	Pierce-Arrow	Reo	Studebaker†	Willys	Miscellaneous‡	Monthly Totals
January	'37	§	4583	4583					968		6559			4923	2573	441	280685
	'36	1128	1467	2595	201				892	328	3030	56	241	3943	707	11	215782
	'35	851	833	1684	486				596	552	431	50	228	2677	267	108	136635
	'34		1468	1468	434	180	336	47	453	292	349	99	208	2242	506	47	61242
	'33		755	755	255	435	6	126	678	483	523	138	199	2390	1010	320	79845
	'32		1721	1721	644	56		220	1141	727	1065	258	337	3402	2166	1033	87490
	'31		2622	2622	1041	497		316	1097	1069	1230	396	678	3270	2794	2858	126786
	'30		3657	3657	672			616	2036	2166	1827	431	807	3975	3203	6397	180094
February	'37	§	4210	4210					901		6588			4704	3339	301	215049
	'36	869	970	1839	182				798	208	2424	48	157	3199	781	22	176668
	'35	810	803	1613	423				900	440	348	39	194	2123	637	89	170615
	'34	31	946	977	232	126	242	40	639	256	292	98	222	2228	355	23	94887
	'33		738	738	215	318	48	76	643	423	674	113	196	2164	847	162	69471
	'32		1711	1711	916	55		175	1342	1066	629	291	325	3625	2865	2296	82799
	'31		2347	2347	1676	379		331	1263	1282	1125	397	590	3121	3975	3589	134133
	'30		2891		910			705	1839	1745	1623	540	921	3699	3593	6080	211645
March	'37	§	7250	7250					1313		10310			7656	5329	277	363738
	'36	1695	1962	3657	266				1290	300	4739	72	324	5703	799	16	301272
	'35	1216	1212	2438	482				1323	795	928	59	317	3304	974	56	261477
	'34	167	1418	1585	186	166	149	50	1173	317	421	144	222	4164	325	23	173287
	'33		703	703	182	330	89	105	708	473	720	117	194	2215	882	159	78749
	'32		2642		1085	65		191	1656	2494	1250	286	332	4191	3048	727	92175
	'31		3935		3335			419	1825	2020	1406	517	749	4802	4677	3691	200841
	'30		4812		1447			964	2638	2899	2360	778	1271	5415	5186	8344	298822
April	'37	§	9312	9312					1636		12611			8794	5916	239	384951
	'36	2306	2737	5043	426				1654	211	6690	100	428	7775	994	87	397190
	'35	1917	1748	3665	564				1891	947	3236	75	411	4527	952	62	319652
	'34	250	1501	1751	373	126	97	46	1838	516	646	189	261	4891	415	32	223050
	'33		1040	1040	650	354	142	96	982	656	915	169	252	2859	1051	238	119972
	'32		3562	3562	1294	111		190	1357	1665	1565	365	421	4910	2958	3233	121089
	'31		5259	5259	4724	314		470	2169	2562	1778	624	891	6074	6224	2777	265732
	'30		6275	6275	1744			1034	4645	3458	3038	912	1429	6458	6762	9307	357065
May	'37	§	8725	8725					1450		11400			7805	5929	251	391697
	'36	2495	2676	5171	453				2021	176	6302	76	415	7657	1309	1208	392750
	'35	1684	1593	3277	561				1838	877	3964	75	418	4479	981	52	293201
	'34	978	1738	2716	598	85	45	96	1537	656	516	211	519	4142	825	21	219225
	'33		1222	1222	984	364	176	129	1015	802	1010	168	369	3490	2576	155	160225
	'32		2814	2814	705	142		149	1297	1088	1285	299	490	5099	2933	510	131263
	'31		4622	4622	4924	266		372	2234	2372	1483	573	606	5420	5857	3000	247727
	'30		5819	5819	1619			794	4655	3189	2940	864	1077	6291	6254	8078	345041
June	'37	§	7618	7618					1404		10074			7040	5737	222	360236
	'36	2310	2258	4568	329				1837	119	5518	59	361	7187	1539	954	369423
	'35	1264	2144	3408	495				1728	724	4313	80	411	3966	1062	51	280360
	'34	1361	1343	2704	477	58	23	45	1291	670	582	193	466	5233	780	18	223864
	'33		1268	1268	742	382	292	143	1105	818	907	195	376	4192	2546	104	174219
	'32		2395	2395	2223	113		141	1123	875	1186	212	464	4705	2655	6053	148733
	'31		3786	3786	3794	227		300	2154	1827	7335	452	539	4741	4848	2496	201911
	'30		4913	4913	1065	43		610	3488	2572	4008	628	744	5107	4344	5690	260942
July	'37	§	7411	7411					1431		9076			6717	6117	214	365767
	'36	2315	2153	4468	299				1925	92	5070	70	354	5457	1513	675	357490
	'35	1872	2081	3953	522				1763	727	4259	87	365	3913	1157	34	285195
	'34	1410	1216	2626	602	35	19	12	1532	694	841	220	467	4748	946	26	229006
	'33		1143	1143	551	335	328	153	1144	694	806	230	396	4119	1444	76	185700
	'32		1415	1415	1864	133		107	1022	582	652	139	327	3289	2187	338	104188
	'31		5173	5173	3344	219		276	2039	1655	1880	355	532	4513	4566	2513	194291
	'30		5227	5227	991	1139		526	3195	2728	3261	534	791	6001	5988	4565	254097
August	'37	§	6465	6465					1315		7649			5378	5242	256	306958
	'36	1376	1698	3074	238				1329	49	5923	83	244	2601	1128	203	262912
	'35	2181	1702	3883	415				1570	627	3741	72	370	3317	860	31	233851
	'34	1341	961	2302	509	19	17	8	1288	662	635	184	394	3640	884	23	193198
	'33		801		406	334	403	142	1103	610	678	203	299	3202	1415	76	178935
	'32		1191		1149	225		172	1172	580	827	187	331	3445	1810	301	93457
	'31		3855		2339	195		265	1467	1258	1561	265	452	3413	3494	1804	155707
	'30		3939		689	1057		464	2069	1782	2220	464	962	6050	4469	6153	203737
September	'37	§	4460	4460					1281		4795			4475	3626	272	235683
	'36	873	1246	2119	181				1096	32	6131	67	215	4808	1003	379	208896
	'35	1920	1374	3294	524				1234	492	2827	78	370	2726	594	27	157098
	'34	1038	907	1945	641	19	4	6	865	572	555	103	289	2554	562	33	146931
	'33		574		359	280	510	110	939	536	974	191	364	2205	1201	65	157976
	'32		934		758	319		131	1125	451	843	189	295	3088	1838	219	81893
	'31		2872		1694	126		230	1887	1040	1609	219	447	3000	2760	1669	124875
	'30		3855		620	807		544	1908	1265	2362	530	871	4750	3111	4229	175286
October	'37	§	3191	3191					925		5584			4855	3150	282	202898
	'36	525	1609	2134	174				1059	19	8453	62	203	7202	968	360	171319
	'35	1492	1213	2705	358				1290	426	4970	108	288	2575	744	588	148389
	'34	1066	1132	2198	651	61	7	5	1003	616	636	90	310	3094	420	22	140937
	'33		460		292	257	510	100	752	508	893	252	437	2364	1035	99	136326
	'32		774		500	441		101	727	409	816	255	238	2522	1687	182	63195
	'31		1973		1232	111		288	1514	925	1354	258	542	3304	2937	1321	102639
	'30		4147		524	630		541	1687	1119	2348	483	941	3900	3705	2849	150219
November	'37	§	3664	3664					573		5727			4194	2497	289	196469
	'36	201	3150	3351	134				1070	10	6963	54	125	5739	556	773	223560
	'35	1035	1133	2168	263				757	359	4493	73	233	1968	1137	552	220262
	'34	947	1022	1969	450	94	6	3	656	675	598	110	262	2511	308	32	107574
	'33		1112		204	171	451	97	587	445	624	265	342	4218	780	51	94180
	'32		544		291	407		131	485	392	518	131	150	1925	869	160	44358
	'31		1515		839	80		242	875	842	805	247	404	2717	3100	875	75821
	'30		3213		324	367		421	1073	719	1398	371	929	2537	2422	1838	93066
December	'37	§	3682	3682					787		5082			3507	1956	262	179621
	'36	211	4840	5051	139				1468	12	7529	46	79	6564	1126	606	327303
	'35	1203	1903	3106	245				1075	484	4160	79	289	3998	1074	33	237194
	'34	712	663	1375	383	88	8	2	612	640	481	99	234	2113	253	24	75356
	'33		1537		198	117	355	52	472	278	360	111	199	2826	571	61	58624
	'32		529		217	441		121	410	465	420	80	159	1465	881	127	45683
	'31		1407		593	61		372	683	573	686	219	331	2157	2069	903	77553
	'30		2338		665	311		292	904	665	933	310	706	2342	2369	1843	96054

§Included in Nash total. ¶Included in Hudson total.

Who's Who

(Continued from Previous Page)

CHEVROLET MOTOR DIVISION, General Motors Corp., General Motors bldg., Detroit. Production division: M. E. Coyle, gen. mgr.; E. W. Ivey, gen. aud.; C. E. Wetherald, gen. mfg. mgr.; Hugh Dean, asst. mfg. mgr.; E. C. Shaw, gen. supt. assm. plants; A. E. Jacobson, div. compt.; J. M. Crawford, chief engr.; J. G. Wood, asst. chief engr.; D. P. O'Keefe, dir. of pur.; C. R. Scharff, traffic dir. Selling division: M. E. Coyle, gen. mgr.; E. W. Ivey, gen. aud.; W. E. Holler, gen. sales mgr.; Felix Doran jr., asst. gen. sales mgr.; T. H. Keating, asst. gen. sales mgr.; W. G. Lewellen, asst. gen. sales mgr.; J. E. Johnson, asst. gen. sales mgr.; A. E. Jacobson, div. comp.; C. P. Fisken, mgr. adv. dept.; J. M. Hendrie, mgr. car distr. dept.; W. E. Fish, mgr. com. car dept.; M. D. Douglas, mgr. parts and acces. mer. dept.; E. Hedner, mgr. svc. and mech. dept.; E. J. Hogan, bus. mgmnt. dept. (See display advertising index)

CHICAGO GOVERNOR & MFG. CO., 509-11 S. Laflin st., Chicago, Ill. Automobile governors. John Abbott, chmn., pres., vice-pres.; L. Jaskey, secy.; T. Jaskey, treas.; C. R. Hiser, gen. mgr., sales mgr., adv. mgr., pur. agt.; C. L. Unruh, engr. Det. Rep.—R. H. Newell, 14790 Kilbourne ave.

CHICAGO LOCK CO., 2024 N. Racine ave., Chicago, Ill. Cylinder locks for automobile: ignition, door, trunk, tire. W. C. Shinn, pres.; C. K. Anderson, vice-pres.; L. B. Shinn, secy.-treas. Det. Rep. — F. J. Niedermiller, 4829 Woodward ave. Adv. Agcy.—Rogers & Smith, 20 N. Wacker dr., Chicago.

CHICAGO PNEUMATIC TOOL CO., 6 E. 44 st., New York, N. Y. Pneumatic tools, electric tools, air compressors, rock drills, diesel engines. H. A. Jackson, pres.; W. L. Lewis, vice-pres.; H. H. Sherman, adv. mgr.; Geo. A. Rees, pur. agt. Det. Rep.—C. P. T. Co. Branch and Service Station, 570 E. Larned st.

CHICAGO RAWHIDE MFG. CO., 9000 Alpine ave., Detroit, Mich. and 1301 Elston ave., Chicago, Ill. Oil seals and grease retainers, mechanical leather parts, mallets and hammers, synthetic rubber products. W. H. Emery, pres.; Jess Agger, S. C. McCombs, R. J. Vedovell, vice-pres.; M. A. Schiltz, secy.; S. E. Ullman, treas.; Jess Agger, gen. mgr., Chicago; S. C. McCombs, gen. mgr., Detroit; A. F. Gardner, engr., Detroit; E. Frodin, pur. agt., Chicago; H. Brown, pur. agt., Detroit. Det. Rep.—S. C. McCombs, A. F. Gardner, A. F. Maglione.

CHICAGO RIVET & MACHINE CO., 1830 S. 54th st., Cicero, P. O., Chicago, Ill. Tubular, split and solid small rivets; automatic rivet setting machines; brake service equipment. John A. Morrissey, chmn., pres.; Herman J. Tonn, M. F. McManus, vice-pres.; E. P. O'Malley jr., treas.; A. V. Goebel, gen. mgr.; E. J. Morrissey, secy., sales and adv. mgr.; W. Bautz, pur. agt. Det. Rep.—M. F. McManus, 706 Stephenson bldg. Adv. Agcy.—Ray Hudson, 205 W. Wacker dr., Chicago, Ill.

CHISHOLM-MOORE HOIST CORP. Tonawanda, N. Y. Differential hoists, chain hoists, trolleys (monorail), electric hoists, traveling cranes. Franz T. Stone, pres.; A. L. McKinnon, vice-pres.; A. G. Holden, secy.; D. S. Brisbin, sales mgr.; R. E. Gerspacher, adv. mgr. Adv. Agcy.—Addison Vars, Inc., Buffalo, N. Y.

CHRIS-CRAFT CORP., Algonac, Mich. Utility boats, runabouts, cruisers, marine engines. Christopher C. Smith, chmn.; Jay W. Smith, pres., treas.; Harsen Smith, vice-pres., gen. mgr.; Bernard T. Smith, vice-pres.; Owen N. Smith, secy., pur. agt.; Wayne S. Pickell, sales mgr., adv. mgr.; A. W. MacKerer, engr. Adv. Agcy.—Brooke Smith & French, Inc., 82 E. Hancock, Detroit, Mich.

CHRISTENSEN & OLSEN FDY. CO., 218 N. Racine ave., Chicago, Ill. Brass, bronze and aluminum and special metals. Al. Christensen, chmn., pres.; A. O. Olsen, secy.-treas.

CHRYSLER CORP., Amplex Division, 6501 Harper ave., Detroit, Mich. Ollite, oil cushion bronze bearings. A. J. Langhammer, pres. Det. Rep.—Welker Machinery Co., Inc., 411 New Center bldg.

CHRYSLER CORP., Export Division, 341 Massachusetts, Highland Park, Mich. Motor cars, trucks, marine and industrial engines. W. Ledyard Mitchell, chmn.; E. C. Morse, pres.; C. B. Thomas, vice-pres., sales mgr.; E. W. Salley, secy.-treas.; H. O. Ward, adv. mgr.; T. W. Sheahan, engr.; E. C. Row, opr. mgr.; C. E. Dalton, dir. of truck sales; H. P. Stewart, chmn., exec. sales com.

CHRYSLER CORP. OF CANADA, Ltd., Windsor, Ont. Passenger cars and trucks. W. Ledyard Mitchell, chmn.; J. D. Mansfield, pres.; C. W. Churchill, Lester L. Colbert, vice-pres.; Kenneth Crittenden, vice-pres. in chge. of mfg.; E. W. Knevals, secy.-treas.; J. C. McGuire, Chrysler, Plymouth and Fargo sales mgr.; A. J. Shaw, Dodge and De Soto sales mgr.; A. M. Miller, adv. mgr.; A. J. Hickey, serv. mgr.; W. A. McGraw, chief engr. Adv. Agcy.—Walsh Advertising Agency.

CHRYSLER EXPORT CORP., Div. of Chrysler Corp., 341 Massachusetts ave., Detroit, Mich. W. Ledyard Mitchell, chmn.; E. C. Morse, pres.; C. B. Thomas, vice-pres., gen. sales mgr.; Lester L. Colbert, vice-pres.; E. W. Salley, secy.-treas.; H. P. Stewart, chmn. of exec. management comm.; H. O. Ward, dir. of adv.; W. B. Chapoton, adv. mgr.; E. E. Pratt, sales prom. mgr.; E. C. Row, dir. of operations; F. T. Jarvis, dir. of serv.; C. E. Dalton, dir. of truck sales; T. W. Sheahan, chief engr.

(Continued on Page 38)

Production and Registrations by Months

Showing Percentage of Year's Total for Each Month, 1929-1937

New Passenger Car Registrations in U. S.

	1937 Registrations	% of Total	1936 Registrations	% of Total	1935 Registrations	% of Total	1934 Registrations	% of Total	1933 Registrations	% of Total	1932 Registrations	% of Total	1931 Registrations	% of Total	1930 Registrations	% of Total	1929 Registrations	% of Total	*9-Year Average	Av. % *Over 9 Yrs.
January	280,685	8.06	215,775	6.34	136,635	4.98	61,242	3.24	79,845	5.34	87,493	7.98	126,776	6.64	180,094	6.85	219,760	5.66	154,255	6.12
February	215,049	6.17	176,651	5.19	170,615	6.21	94,887	5.02	69,471	4.65	82,813	7.55	134,133	7.02	211,645	8.05	235,590	6.07	154,538	6.24
March	363,738	10.44	301,239	8.85	261,477	9.53	173,287	9.17	78,749	5.27	92,192	8.4	200,841	10.52	298,824	11.37	377,802	9.73	238,681	9.25
April	384,951	11.05	397,186	11.67	319,652	11.65	223,050	11.81	119,972	8.03	121,093	11.04	265,732	13.92	357,064	13.59	481,675	12.41	296,704	11.69
May	391,697	11.24	392,744	11.54	293,201	10.69	219,225	11.6	160,225	10.72	131,282	11.97	247,727	12.98	345,031	13.13	454,132	11.7	292,804	11.73
June	360,236	10.34	369,422	10.85	280,360	10.22	223,864	11.85	174,219	11.66	148,752	13.56	201,911	10.57	260,861	9.93	386,398	9.97	267,333	10.99
July	365,767	10.50	357,490	10.50	285,195	10.39	229,006	12.12	185,700	12.43	104,188	9.5	194,322	10.18	254,098	9.67	432,503	11.14	267,583	10.72
August	306,958	8.81	262,912	7.72	233,851	8.52	193,198	10.22	178,935	11.97	93,457	8.52	155,744	8.16	203,737	7.75	376,886	9.71	222,851	9.04
September	235,683	6.77	208,896	6.14	157,098	5.73	146,931	7.77	157,834	10.56	81,893	7.46	124,903	6.54	175,286	6.67	304,452	7.84	176,996	7.28
October	202,898	5.82	171,397	5.03	148,389	5.41	140,937	7.46	136,075	9.1	63,195	5.76	102,659	5.38	150,219	5.72	288,697	7.44	156,052	6.35
November	196,469	5.64	223,732	6.57	220,262	8.03	107,574	5.69	94,145	6.3	44,358	4.04	75,829	3.97	93,066	3.54	183,756	4.73	137,687	5.39
December	179,621	5.16	327,053	9.61	237,194	8.64	75,356	3.99	58,624	3.92	45,683	4.16	77,564	4.06	96,054	3.65	138,555	3.57	248,412	5.20
Total	3,483,752	100%	3,404,497	100%	2,743,908	100%	1,888,557	100%	1,493,794	100%	1,096,399	100%	1,908,141	100%	2,625,979	100%	3,880,206	100%	2,613,896	100%

New Truck Registrations in U. S.

	1937 Registrations	% of Total	1936 Registrations	% of Total	1935 Registrations	% of Total	1934 Registrations	% of Total	1933 Registrations	% of Total	1932 Registrations	% of Total	1931 Registrations	% of Total	1930 Registrations	% of Total	1929 Registrations	% of Total	*9-Year Average	Av. % *Over 9 Yrs.
January	47,618	7.70	43,760	7.16	34,759	6.81	22,903	5.67	11,709	4.76	14,776	8.19	24,415	7.78	30,236	7.36	29,900	5.67	28,897	6.79
February	41,843	6.77	40,301	6.59	34,797	6.81	24,476	6.06	9,707	3.94	14,558	8.07	23,466	7.47	31,880	7.76	32,637	6.19	28,185	6.63
March	60,301	9.75	52,428	8.57	41,511	8.13	33,884	8.38	9,934	4.04	16,874	9.35	30,609	9.75	42,199	10.27	46,368	8.79	37,123	8.56
April	67,832	10.97	64,956	10.62	46,785	9.16	38,882	9.62	17,301	7.03	17,784	9.85	36,848	11.74	47,029	11.45	56,299	10.68	43,746	10.12
May	65,857	10.65	62,183	10.17	47,968	9.39	39,831	9.86	20,925	8.5	18,696	10.37	33,496	10.67	43,286	10.54	52,874	10.03	42,790	10.02
June	58,626	9.48	56,851	9.30	48,243	9.45	34,778	8.61	23,254	9.45	17,876	9.9	28,496	9.07	33,531	8.16	45,114	8.55	38,530	9.12
July	61,686	9.98	63,695	10.41	51,243	10.03	37,490	9.28	30,642	12.46	14,731	8.16	30,102	9.58	39,904	9.71	57,943	10.99	43,048	10.07
August	60,872	9.85	59,222	9.68	50,355	9.86	40,790	10.09	28,799	11.71	15,081	8.36	27,070	8.62	33,787	8.22	52,557	9.97	40,948	9.60
September	54,711	8.85	54,611	8.92	41,390	8.11	37,225	9.21	31,269	12.71	14,967	8.29	25,967	8.27	33,933	8.26	46,560	8.83	37,848	9.05
October	40,246	6.51	41,220	6.74	37,439	7.33	40,878	10.12	28,058	11.41	15,156	8.4	24,685	7.86	34,237	8.33	49,899	9.46	34,646	8.46
November	27,248	4.41	30,255	4.94	36,935	7.23	28,689	7.1	18,691	7.6	10,392	5.76	15,553	4.95	22,012	5.36	33,631	6.38	24,823	5.99
December	31,409	5.08	42,162	6.89	39,258	7.69	24,060	5.95	15,580	6.33	9,522	5.27	13,177	4.19	18,665	4.54	23,275	4.41	24,123	5.59
Total	618,249	100%	611,644	100%	510,683	100%	403,886	100%	245,869	100%	180,413	100%	313,884	100%	410,699	100%	527,057	100%	424,707	100%

Combined Car and Truck Registrations in U. S.

	1937 Registrations	% of Total	1936 Registrations	% of Total	1935 Registrations	% of Total	1934 Registrations	% of Total	1933 Registrations	% of Total	1932 Registrations	% of Total	1931 Registrations	% of Total	1930 Registrations	% of Total	1929 Registrations	% of Total	*9-Year Average	Av. % *Over 9 Yrs.
January	328,303	8.00	259,535	6.46	171,394	5.27	84,145	3.67	91,554	5.26	102,269	8.009	151,191	6.8	210,330	6.92	249,660	5.66	183,151	6.23
February	256,892	6.26	216,952	5.40	205,412	6.31	119,363	5.2	79,178	4.55	97,371	7.62	157,599	7.09	243,525	8.01	268,227	6.08	182,724	6.28
March	424,039	10.34	353,667	8.81	302,988	9.31	207,171	9.03	88,683	5.09	109,066	8.54	231,450	10.41	341,023	11.22	424,070	9.62	275,795	9.15
April	452,783	11.04	462,142	11.51	366,437	11.26	261,932	11.42	137,273	7.89	138,877	10.87	302,580	13.61	404,093	13.3	537,974	12.2	340,454	11.46
May	457,554	11.15	454,927	11.33	341,169	10.48	259,056	11.3	181,150	10.41	149,978	11.74	281,223	12.65	388,317	12.78	507,066	11.5	335,604	11.48
June	418,862	10.22	426,273	10.61	328,603	10.10	258,642	11.28	197,473	11.35	166,628	13.04	230,407	10.37	294,392	9.69	431,512	9.79	305,866	10.72
July	427,453	10.42	421,185	10.49	336,438	10.34	266,496	11.62	216,342	12.43	118,919	9.31	224,424	10.09	294,002	9.68	490,446	11.12	310,634	10.64
August	367,830	8.97	322,134	8.02	284,206	8.71	233,988	10.2	207,734	11.94	108,538	8.5	182,814	8.22	237,524	7.82	429,443	9.74	263,801	9.12
September	290,394	7.08	263,507	6.56	198,488	6.10	184,156	8.03	189,103	10.86	96,860	7.58	150,870	6.79	209,219	6.88	351,012	7.96	214,845	7.54
October	243,144	5.93	212,617	5.29	185,828	5.71	181,815	7.93	164,133	9.43	78,351	6.13	127,344	5.73	184,456	6.07	338,596	7.68	190,698	6.66
November	223,717	5.45	253,987	6.32	257,197	7.91	136,263	5.94	112,836	6.48	54,750	4.28	91,382	4.11	115,078	3.78	217,387	4.93	162,511	5.47
December	211,030	5.14	369,215	9.19	276,452	8.50	99,416	4.33	74,204	4.26	55,205	4.32	90,741	4.08	114,719	3.77	161,830	3.67	161,424	5.25
Total	4,102,001	100%	4,016,411	100%	3,254,612	100%	2,292,443	100%	1,739,663	100%	1,276,812	100%	2,222,025	100%	3,036,678	100%	4,407,263	100%	2,927,507	100%

Passenger Car Production, U. S. and Canada

	1937 Production	% of Total	1936 Production	% of Total	1935 Production	% of Total	1934 Production	% of Total	1933 Production	% of Total	1932 Production	% of Total	1931 Production	% of Total	1930 Production	% of Total	1929 Production	% of Total	*9-Year Average	Av. % *Over 9 Yrs.
January	324,191	7.97	309,535	8.13	237,502	6.92	117,700	5.18	112,754	6.92	101.915	8.58	142,869	7.00	242,672	8.36	364,773	7.62	217,101	7.41
February	310,961	7.74	235,669	6.19	289,508	8.45	193,875	8.53	93,153	5.72	98,604	8.30	187,948	9.24	293,036	10.06	431,755	9.03	237,167	8.14
March	423,006	10.50	358,011	9.40	379,995	11.09	291,546	12.86	103,396	6.35	106,003	8.93	241,727	11.85	348,087	11.96	546,489	11.39	310,918	10.48
April	452,907	11.23	437,380	11.49	422,316	12.33	303,806	13.38	156,712	9.62	126,597	10.66	300,960	14.76	393,804	13.53	571,956	11.92	351,826	12.10
May	422,412	10.38	401,896	10.56	324,552	9.48	290,268	12.78	188,675	11.59	165,025	13.90	282,096	13.84	382,619	13.14	541,310	11.28	333,206	11.88
June	429,333	10.55	389,020	10.22	308,885	9.02	272,090	11.98	213,602	13.12	166,646	14.03	215,979	10.59	298,130	10.24	469,260	9.78	306,994	11.06
July	372,913	9.27	380,594	10.00	285,555	8.34	231,501	10.19	196,587	12.07	101,478	8.54	187,324	9.19	230,761	7.92	439,598	9.16	269,590	9.42
August	317,270	7.80	212,805	5.59	187,913	5.49	190,825	8.43	196,333	12.06	79,073	6.66	158,851	7.79	190,864	6.55	452,857	9.44	220,755	7.76
September	120,597	2.98	93,078	2.44	61,104	1.78	129,251	5.69	161,734	9.93	66,489	5.60	111,336	5.49	182,049	6.25	375,046	7.84	144,520	5.33
October	306,040	7.52	195,280	5.13	221,737	6.47	86,128	3.79	107,593	6.61	37,468	3.28	59,176	2.90	117,014	4.06	328,305	6.84	162,082	5.18
November	309,121	7.60	351,542	9.23	350,467	10.23	50,072	2.20	43,868	2.66	49,201	4.14	49,996	2.45	104,668	3.59	176,629	3.68	165,062	5.09
December	258,762	6.46	442,561	11.62	355,983	10.39	113,395	4.99	52,960	3.25	87,710	7.38	99,921	4.90	126,483	4.34	96,920	2.02	181,633	6.15
Total	4,068,520	100%	3,807,371	100%	3,425,517	100%	2,270,457	100%	1,627,367	100%	1,186,209	100%	2,038,183	100%	2,910,187	100%	4,794,898	100%	2,900,854	100%

Motor Truck Production, U. S. and Canada

	1937 Production	% of Total	1936 Production	% of Total	1935 Production	% of Total	1934 Production	% of Total	1933 Production	% of Total	1932 Production	% of Total	1931 Production	% of Total	1930 Production	% of Total	1929 Production	% of Total	*9-Year Average	Av. % *Over 9 Yrs.
January	74,995	7.92	67,771	8.37	65,890	8.71	44,870	7.48	19,429	5.46	21,160	8.62	35,475	8.17	40,938	6.82	57,765	6.98	47,588	7.62
February	72,939	7.70	65,205	8.05	64,273	8.49	44,952	7.49	15,592	4.34	24,291	9.90	41,863	9.64	52,925	8.82	65,950	7.97	49,777	8.04
March	96,016	10.13	80,981	10.00	71,773	9.48	61,068	10.18	18,508	5.16	21,274	8.67	47,671	10.97	69,031	11.54	79,587	9.62	60,657	9.53
April	100,324	10.59	90,346	11.16	79,498	10.50	67,538	11.26	27,975	7.80	28,539	11.63	53,138	12.23	74,477	12.41	91,855	11.10	68,188	10.96
May	96,965	10.23	78,675	9.72	60,812	8.03	60,348	10.06	35,132	9.79	27,491	11.23	47,805	11.06	62,080	10.34	94,940	11.48	62,694	10.22
June	91,820	9.69	80,335	9.92	68,108	9.00	48,292	8.05	43,448	12.12	23,572	9.62	41,496	9.55	51,466	8.57	98,164	11.87	60,745	9.82
July	83,996	8.86	70,880	8.76	64,499	8.52	44,546	7.42	39,310	10.96	15,137	6.17	35,386	8.15	44,960	7.49	78,703	9.51	53,046	8.43
August	87,802	9.27	63,146	7.80	59,773	7.90	53,890	8.95	42,601	11.88	15,319	6.24	32,890	7.57	43,296	7.21	59,985	7.25	50,967	8.23
September	55,033	5.82	46,707	5.77	34,023	4.49	46,335	7.75	35,874	10.00	20,003	8.15	31,876	7.34	46,557	7.75	54,683	6.66	41,233	7.08
October	31,939	3.37	34,709	4.29	61,600	8.14	49,643	8.28	30,772	8.58	14,157	5.77	22,406	5.16	41,928	6.98	66,235	8.05	39,265	6.52
November	67,508	7.12	54,160	6.69	61,068	8.07	35,107	5.85	19,106	5.32	12,560	5.12	20,118	4.63	37,493	6.24	50,368	6.06	39,721	6.12
December	88,117	9.30	76,571	9.46	65,596	8.67	42,961	7.19	30,795	8.58	21,782	8.88	24,052	5.53	34,840	5.83	28,582	3.45	45,922	7.43
Total	947,454	100%	809,486	100%	756,913	100%	599,550	100%	358,542	100%	245,285	100%	434,176	100%	599,991	100%	826,817	100%	619,803	100%

Passenger Car and Truck Production, U. S. and Canada

	1937 Production	% of Total	1936 Production	% of Total	1935 Production	% of Total	1934 Production	% of Total	1933 Production	% of Total	1932 Production	% of Total	1931 Production	% of Total	1930 Production	% of Total	1929 Production	% of Total	*9-Year Average	Av. % *Over 9 Yrs.
January	399,186	7.95	377,306	8.17	303,392	7.25	162,570	5.64	132,183	6.65	123,075	8.59	178,344	7.22	283,610	8.09	422,538	7.51	264,689	7.45
February	383,900	7.65	300,874	6.52	353,781	8.47	238,827	8.29	108,745	5.47	122,895	8.58	229,811	9.29	345,961	9.85	497,705	8.85	286,944	8.12
March	519,022	10.35	438,992	9.51	451,768	10.80	352,614	12.24	121,904	6.13	127,277	8.89	289,398	11.70	417,118	11.88	626,076	11.13	371,574	10.29
April	553,231	11.03	527,726	11.43	501,814	12.00	371,344	12.89	184,687	9.29	155,136	10.83	354,098	14.32	468,281	13.34	663,811	11.80	420,016	11.88
May	540,377	10.77	480,571	10.41	385,364	9.21	350,616	12.17	223,807	11.26	192,516	13.44	329,901	13.34	444,699	12.66	636,250	11.32	398,233	11.62
June	521,153	10.39	469,355	10.17	376,993	9.01	320,382	11.12	257,050	12.98	190,218	13.28	257,475	10.44	349,596	9.95	567,424	10.09	367,738	10.83
July	456,909	9.11	451,474	9.78	350,054	8.37	276,047	9.58	235,897	11.87	116,615	8.14	222,710	9.007	275,721	7.86	518,301	9.26	322,636	9.22
August	405,072	8.08	275,951	5.98	247,686	5.92	244,715	8.49	238,934	12.03	94,392	6.59	191,741	7.75	234,160	6.67	512,842	9.12	271,721	7.86
September	175,630	3.50	139,785	3.03	95,127	2.27	175,586	6.09	197,608	9.95	86,492	6.04	143,212	5.79	228,606	6.54	429,729	7.64	185,753	5.65
October	337,979	6.74	229,989	4.98	283,337	6.78	135,771	4.72	138,365	6.96	51,625	3.65	81,582	3.29	158,942	4.53	394,540	7.02	201,348	5.42
November	376,629	7.51	405,702	8.79	411,535	9.84	85,179	2.95	62,974	3.17	61,761	4.33	70,114	2.83	142,161	4.04	226,997	4.03	204,784	5.28
December	346,886	6.92	519,132	11.24	421,579	10.08	156,356	5.42	83,755	4.24	109,472	7.64	123,973	5.06	161,323	4.59	125,502	2.23	227,553	6.38
Total	5,015,974	100%	4,816,857	100%	4,182,430	100%	2,870,007	100%	1,985,909	100%	1,431,494	100%	2,472,359	100%	3,510,178	100%	5,621,715	100%	3,522,989	100%

*Nine-year average used to show contrast between January announcement period and fall announcements, which went into effect in 1935. The shift in sales trends is noticeable in November and December figures.

NEW ROAD-DRYING TIRE TAKES COUNTRY BY STORM IN LESS THAN 6 MONTHS!

Sell This New Kind Of Tire Safety That America Is Demanding! Read How This Sensational Quick-Stopping Tire Will Put New Life In Your Business

READ THESE COMMENTS —THEY'RE TYPICAL OF HUNDREDS RECEIVED BY GOODRICH DEALERS FROM THEIR CUSTOMERS

"I attribute my being alive today to the fine non-skid qualities in this new Silvertown tire. A few weeks ago when in Nashville, Tenn. a woman driver approached an intersection that had a stop sign. She disregarded the sign and before I knew it, a collision seemed inevitable. The street was wet and I relied entirely on the tires for an emergency stop, and they didn't let me down." *Greeneville, Tenn., motorist*

"I have used many tires and frankly it's a new experience to have tires that grip in rainy weather seemingly as if you were on perfectly dry roads." *Columbus, Ohio, motorist*

"They have been driven steadily for over three months and on several occasions I ran into slippery roads that gave other cars a great deal of trouble, but I did not skid an inch." *Bridgeport, Conn. motorist*

"As to their sureness of grip, I had the experience that called for a sudden stop coming over a knoll on the highway. It was at night and all of a sudden there appeared before me about 25 sheep on the highway. The "Life-Saver" Tread tires did the work." *Warren, Ill. motorist*

"In buying the new Goodrich Safety Tire, I believe I received more than I paid for. I don't believe I have skidded an inch and believe me, I tried to just to prove you were wrong. If I could not buy another set, you couldn't have these for double what I paid for them." *Des Moines, Iowa, motorist*

"It just did not seem possible that any tire could contribute so much to the feeling of safety I now enjoy. All that you claimed about safe, sure stopping has been verified time and again." *Freeport, Ill., motorist*

NO PREMIUM PRICE!

NEVER before has the performance of any tire so completely won over motorists! Yet it's not surprising. Because never before has any tire been so painstakingly designed and built to give your customers the extra safety they need and want. Here is a tire that will stop them quicker, safer on a wet pavement than they've ever stopped before—a statement that you can back up with *proof* on the road or right in your shop.

An Instant Success

Yes, this new Goodrich Safety Silvertown "caught on" right from the start. And sales are still going up!—not alone because of this remarkable skid protection but because Silvertowns also offer the famous Golden Ply blow-out protection and months of extra mileage—ALL AT NO PREMIUM PRICE.

Investigate NOW

When a tire "makes good" with motorists the way this new Goodrich Silvertown has, selling this tire can have only one outcome for *you*—more sales and profits! Whether you are in the tire business now or expect to enter it, the most *businesslike* move is a Goodrich Franchise. And remember, this franchise today means more than selling tires alone—it gives you an outstanding line of batteries, tubes, accessories for *all-season, all-market* sales and profits. Act now. Get in touch by mail, wire or telephone with The B. F. Goodrich Company, Dept. 500, Akron, Ohio, Los Angeles, Cal., or Kitchener, Ont., Canada.

ONLY GOODRICH DEALERS CAN USE THIS POWERFUL SELLING TOOL— THE PROOF FROM AMERICA'S LARGEST INDEPENDENT TESTING LABORATORY

SUMMARY OF THE REPORT

"BOTH *regular*, and also the *premium-priced* tires of America's six largest tire manufacturers were submitted to a series of exhaustive road tests made over a three months' period by us, to determine their resistance to skidding and wear, with the following results:

NON-SKID. The new Goodrich Silvertown with the Life-Saver Tread gave greater skid resistance than any other tire tested, including those tires listed at from 40% to 70% higher in price.

MILEAGE. The Goodrich Silvertown gave more non-skid mileage than any of the other tires tested in its own price range—averaged 19.1% more miles before the tires wore smooth.

BLOW-OUT PROTECTION. Despite the severe nature of these tests, no Silvertown Tire blew out or failed from any cause, while two tires of other makes failed."

A. R. Ellis, President

PITTSBURGH TESTING LABORATORY

The new Goodrich SAFETY Silvertown

LIFE-SAVER TREAD SKID PROTECTION — GOLDEN PLY BLOW-OUT PROTECTION

Who's Who

(Continued from Page 35)

CHRYSLER CORP., 341 Massachusetts ave., Detroit, Mich. W. P. Chrysler, chmn.; K. T. Keller, pres., gen. mgr.; J. S. Bache, J. E. Fields, Byron C. Foy, A. vanDerZee, vice-pres.; B. E. Hutchinson, vice-pres., chmn. of finance comm.; Nicholas Kelley, vice-pres.; W. Ledyard Mitchell, vice-pres.; H. L. Weckler, vice-pres. in chge. of operations; F. M. Zeder, vice-pres., vice-chmn. of board; H. A. Davies, treas.; L. A. Moehring, comptr.; R. P. Fohey, secy.; D. J. Hutchinson, asst. treas.; R. B. Pomeroy, asst. secy. Directors: W. P. Chrysler, F. M. Zeder, J. S. Bache, J. C. Brady, Carl Breer, Harry Bronner, Waddill Catchings, W. P. Chrysler jr., George W. Davison, Allen F. Edwards, J. E. Fields, Byron C. Foy, John A. Hartford, B. E. Hutchinson, K. T. Keller, Nicholas Kelley, W. Ledyard Mitchell, O. R. Skelton, Matthew S. Sloan, Harold E. Talbott jr., Juan T. Trippe. Finance comm.: B. E. Hutchinson, J. S. Bache, Harry Bronner, Waddill Catchings, W. P. Chrysler, George W. Davison, John A. Hartford, K. T. Keller, Matthew S. Sloan. Operations comm.: F. H. Akers, F. C. Bahr, C. E. Bleicher, Carl Breer, W. P. Chrysler, L. L. Colbert, H. A. Davies, A. C. Downey, D. S. Eddins, J. E. Fields, R. P. Fohey, B. C. Foy, J. W. Frazer, A. P. Hascall, B. E. Hutchinson, K. T. Keller, Nicholas Kelley, H. R. Matheny, W. L. Mitchell, L. A. Moehring, B. T. Moyer, I. T. O'Brien, W. J. O'Neil, L. G. Peed, T. J. Ross, P. C. Sauerbrey, J. W. Scoville, O. R. Skelton, A. vanDerZee, D. A. Wallace, H. L. Weckler, F. M. Zeder. Inez B. Hooper, operations comm. secy.; E. J. Hunt, staff master mechanic; Carl Breer, O. R. Skelton, Oliver Clark, H. T. Woolson, exec. engrs.; Lester L. Colbert, resident atty.; A. P. Hascall, gen. pur. agt.; N. D. Hoke, dir. of traffic; T. W. Moss, gen. serv. mgr., Chrysler, De Soto, Dodge and Plymouth; I. T. O'Brien, gen. prod. mgr.; J. W. Scoville, statistician; C. T. Winegar, dir. of personnel; Larkin, Rathbone & Perry, New York, General Counsel; Bulkley, Ledyard, Dickinson & Wright, Detroit, Detroit Counsel.
(See display advertising index)

CHRYSLER MARINE ENGINE CORP., Div. of Chrysler Corp., 12200 E. Jefferson ave., Detroit, Mich. Chrysler marine and industrial engines. D. A. Wallace, pres.; H. T. Woolson, vice-pres.; H. E. Fromm, vice-pres. in chge. of marine engines; H. E. Heath, vice-pres. in chge. of industrial engines; Lester L. Colbert, vice-pres.; R. M. Sim, secy.-treas.; T. J. Hilgendorf, serv. mgr. for marine engines. Adv. Agcy.—Lee Anderson Advertising Co., 8415 E. Jefferson ave., Detroit, Mich.

CHRYSLER MOTORS, Ltd., Dodge Bros. (Britain), Ltd., Kew Gardens, Surrey, Eng. Chrysler cars, Dodge trucks. Benjamin King, chmn.; F. H. Orpin, secy.; W. Wallace, dir. Dodge div. (sales mgr. Dodge); E. Colegrove, sales mgr. Chrysler div.; T. N. Treen, adv. mgr.; C. A. Carlson, works mgr.; R. J. Baines, mgr. pur. dept.; A. G. Newton-Jones, mgr. spare parts dept.; W. H. Bunstead, mgr. serv. dept.; G. Dexter, chief truck engr. Adv. Agcy.—Erwin Wasey & Co., Ltd., 10 Smith Sq., London.

CHRYSLER MOTORS PARTS CORP., Div. of Chrysler Corp., 341 Massachusetts ave., Detroit, Mich. Automobile service parts. K. T. Keller, pres.; F. C. Bahr, vice-pres., gen. mgr.; H. R. Matheny, vice-pres., operating mgr.; Lester L. Colbert, vice-pres.; H. A. Davies, treas.; R. P. Fohey, secy.; C. H. Scribner, sales dir.; N. I. Farley, merch. mgr.; G. J. Keefe, adv. mgr.

CHRYSLER SALES CORP., Div. of Chrysler Corp., 12200 E. Jefferson ave., Detroit, Mich. Chrysler Royal, Chrysler Imperial. W. P. Chrysler, chmn.; D. A. Wallace, pres.; J. W. Frazer, K. T. Keller, B. E. Hutchison, F. M. Zeder, Lester L. Colbert, vice-pres.; H. A. Davies, treas.; R. P. Fohey, secy.; C. L. Jacobson, sales mgr.; A. E. Tongue, dir. of adv. and sales prom.; E. R. Maurer, chief engr.; W. A. Hilman, dir. of serv. Adv. Agcy.—Lee Anderson Advertising Co., 8415 E. Jefferson ave., Detroit, Mich.

CIMATOOL CO., 1517-31 E. Third st., Dayton, O. (See Sheffield Gage Corp.)

CINCINNATI BALL CRANK CO., Disney st., near Marburg, Oakley, Cincinnati, O. Power lubricators, hand operated lubricators, garage and service station equipment, oil measures and dispensers, radiator fillers, complete lubrication systems and equipment. R. E. Field, chmn.; John F. Aston, pres.; Richard P. Field, vice-pres.; L. Keck, secy.-treas.; J. T. Roth, sales mgr. (Brookins div.); H. A. Lange, adv. mgr.; Frank Woelfer, engr.; R. Hayes, pur. agt.; R. A. Kaps, plant supt. Adv. Agcy.—J. Horace Lytle Co., Dayton, O.

CINCINNATI MILLING MACH. & CINCINNATI GRINDERS, Inc., Oakley, Cincinnati, O. P. O. Geier, chmn. of bd., treas.; Frederick V. Geier, pres.; W. W. Tangeman, S. Einstein, vice-pres.; F. M. Angevin, secy.; W. W. Tangeman, gen. mgr.; Millard Romaine, sales mgr.; S. E. Bergstrom, asst. sales mgr.; Charles M. Reesey, adv. mgr.; L. Nenninger, chief engr.; W. Peaslee, works mgr.; D. Strauchen, gen. shop supt.; P. Cone, asst. gen. mgr.; H. Ewing, fdy. supt. Det. Rep.—Cincinnati Milling Mach. & Cincinnati Grinders, Inc., 412 New Center bldg.

CINCINNATI RUBBER MFG. CO., Franklin ave. (Norwood), Cincinnati, O. Rubber transmission belting, conveyor belting, elevator belting, industrial hose, molded goods, packing, channel rubber. J. F. Joseph, pres., gen. mgr.; E. J. Henzerling, secy.-treas.; L. P. Darnell, sales mgr.; E.
(Continued on Page 40)

States' and Makers' Sales Figures

1937 Compared With 1936

Figures supplied by R. L. Polk & Co., New Jersey Motor List Co. and Sherlock & Arnold.

List of States in Order of VOLUME of Sales of Passenger Cars

STATE	1937	1937 Pos.	1936	1936 Pos.	Unit Gain	Pct. Gain
New York	329,951	1	303,323	1	26,628	8.7
Pennsylvania	293,909	2	273,281	2	20,628	7.5
Illinois	250,205	3	236,138	5	14,067	6.0
Ohio	250,172	4	244,865	4	5,327	2.2
California	246,075	5	256,255	3	10,180*	4.0 *
Michigan	241,156	6	226,968	6	14,188	6.2
Texas	150,093	7	157,975	7	7,902*	5.0 *
Indiana	123,972	8	116,280	9	7,692	6.6
New Jersey	122,103	9	111,737	10	10,366	9.2
Massachusetts	115,603	10	117,261	8	1,658*	1.4 *
Wisconsin†	97,241	11	89,569	11	7,672	8.5
Missouri	89,965	12	87,740	12	2,225	2.5
Minnesota	82,874	13	81,773	13	1,101	1.3
Iowa	68,196	14	71,883	14	3,687*	5.1 *
Kansas	56,315	15	54,041	17	2,274	4.2
North Carolina	55,341	16	49,364	20	5,977	12.1
Oklahoma	51,580	17	56,605	15	5,025*	8.8 *
Connecticut	51,268	18	51,342	18	74*	.12*
Virginia	50,768	19	50,346	19	422	.83
Washington	49,699	20	54,458	16	4,759*	8.7 *
Georgia	48,823	21	43,581	22	5,242	12.0
Maryland	46,371	22	44,228	21	2,143	4.8
Florida	43,445	23	38,988	26	4,447	11.4
Tennessee	42,320	24	41,959	23	361	.86
Kentucky	41,391	25	40,109	25	1,282	3.2
Oregon	35,915	26	40,460	24	4,545*	11.2 *
West Virginia	35,679	27	37,272	29	1,593*	4.3 *
Alabama	34,936	28	35,198	31	262*	.74*
Louisiana	34,084	29	37,471	28	3,387*	9.0 *
Nebraska	33,640	30	37,695	27	4,055*	10.7 *
Colorado	32,505	31	35,721	30	3,216*	9.0 *
Dist. of Columbia	28,259	32	32,787	32	4,528*	13.8 *
South Carolina	26,959	33	24,020	34	2,939	12.2
Mississippi	22,646	34	25,006	33	2,360*	9.4 *
Rhode Island	20,499	35	19,309	37	1,190	6.2
Maine	20,048	36	17,890	38	2,158	12.0
Arkansas	19,793	37	19,612	36	181	.92
Montana	18,062	38	20,745	35	2,683*	12.9 *
Utah	14,358	39	14,398	40	40*	.28*
Idaho	14,139	40	14,438	39	299*	2.1 *
New Hampshire	12,961	41	12,258	43	703	5.7
South Dakota	12,728	42	13,556	41	828*	6.1 *
Arizona	12,562	43	12,758	42	196*	1.5 *
North Dakota	12,060	44	11,095	44	965	8.6
New Mexico	10,781	45	10,881	45	100*	.92*
Delaware	9,748	46	8,477	47	1,271	15.0
Wyoming	8,968	47	9,693	46	725*	7.5 *
Vermont	8,799	48	8,413	48	386	4.6
Nevada	4,767	49	5,255	49	488*	9.3 *
TOTAL	3,483,752		3,404,497		79,255	2.3

*Loss. †Estimated by A. N.

List of States in Order of PERCENTAGE of Sales INCREASE of Passenger Cars

STATE	Pct. Gain	Unit Gain	Gain Pos.	1937	1937 Pos.	1936	1936 Pos.
Delaware	15.00	1,271	1	9,748	46	8,477	47
South Carolina	12.20	2,939	2	26,959	33	24,020	34
North Carolina	12.10	5,977	3	55,341	16	49,364	20
Georgia‡	12.00	5,242	4	48,823	21	43,581	22
Maine‡	12.00	2,158	5	20,048	36	17,890	38
Florida	11.40	4,447	6	43,445	23	38,988	26
New Jersey	9.20	10,366	7	122,103	9	111,737	10
New York	8.70	26,628	8	329,951	1	303,323	1
North Dakota	8.60	965	9	12,060	44	11,095	44
Wisconsin†	8.50	7,672	10	97,241	11	89,569	11
Pennsylvania	7.50	20,628	11	293,909	2	273,281	2
Indiana	6.60	7,692	12	123,972	8	116,280	9
Michigan‡	6.20	14,188	13	241,156	6	226,968	6
Rhode Island‡	6.20	1,190	14	20,499	35	19,309	37
Illinois	6.00	14,067	15	250,205	3	236,138	5
New Hampshire	5.70	703	16	12,961	41	12,258	43
Maryland	4.80	2,143	17	46,371	22	44,228	21
Vermont	4.60	386	18	8,799	48	8,413	48
Kansas	4.20	2,274	19	56,315	15	54,041	17
Kentucky	3.20	1,282	20	41,391	25	40,109	25
Missouri	2.50	2,225	21	89,965	12	87,740	12
Ohio	2.20	5,327	22	250,172	4	244,865	4
Minnesota	1.30	1,101	23	82,874	13	81,773	13
Arkansas	.92	181	24	19,793	37	19,612	36
Tennessee	.86	361	25	42,320	24	41,959	23
Virginia	.83	422	26	50,768	19	50,346	19
Connecticut	.12*	74*	27	51,268	18	51,342	18
Utah	.28*	40*	28	14,358	39	14,398	40
Alabama	.74*	262*	29	34,936	28	35,198	31
New Mexico	.92*	100*	30	10,781	45	10,881	45
Massachusetts	1.40*	1,658*	31	115,603	10	117,261	8
Arizona	1.50*	196*	32	12,562	43	12,758	42
Idaho	2.10*	299*	33	14,139	40	14,438	39
California	4.00*	10,180*	34	246,075	5	256,255	3
West Virginia	4.30*	1,593*	35	35,679	27	37,272	29
Texas	5.00*	7,902*	36	150,093	7	157,995	7
Iowa	5.10*	3,687*	37	68,196	14	71,883	14
South Dakota	6.10*	828*	38	12,728	42	13,556	41
Wyoming	7.50*	725*	39	8,968	47	9,693	46
Washington	8.70*	4,759*	40	49,699	20	54,458	16
Oklahoma	8.80*	5,025*	41	51,580	17	56,605	15
Louisiana‡	9.00*	3,387*	42	34,084	29	37,471	28
Colorado‡	9.00*	3,216*	43	32,505	31	35,721	30
Nevada	9.30*	488*	44	4,767	49	5,255	49
Mississippi	9.40*	2,360*	45	22,646	34	25,006	33
Nebraska	10.70*	4,055*	46	33,640	30	37,695	27
Oregon	11.20*	4,545*	47	35,915	26	40,460	24
Montana	12.90*	2,683*	48	18,062	38	20,745	35
Dist. of Columbia	13.80*	4,528*	49	28,259	32	32,787	32
TOTAL	2.30	79,255		3,483,752		3,404,497	

*Loss. †Estimated by A. N. ‡Tied.

Makers' Percentage Gains

List of Passenger Car Manufacturers in Order of PERCENTAGE of Sales Increase, 1937-1936

Make	Pct. Gain or Loss	Unit Gain or Loss	Gain Position	12 Mos. 1937	1937 Position	12 Mos. 1936	1936 Position
Willys	+313.8	+ 38,995	1	51,418	14	12,423	17
LaSalle	+106.5	+ 14,914	2	28,906	15	13,992	16
De Soto	+ 65.0	+ 29,333	3	74,421	11	45,088	12
Nash	+ 63.8	+ 27,498	4	70,568	12	43,070	13
Lincoln	+ 62.1	+ 9,675	5	25,242	16	15,567	15
Chrysler	+ 56.0	+ 32,926	6	91,624	9	58,698	11
Packard	+ 38.8	+ 26,674	7	95,446	8	68,772	9
Pontiac	+ 29.5	+ 50,731	8	212,400	5	171,669	6
Buick	+ 27.7	+ 44,617	9	205,304	6	160,687	7
Oldsmobile	+ 5.5	+ 9,814	10	188,302	7	178,488	5
Studebaker	+ 3.3	+ 2,219	11	70,054	13	67,835	10
Dodge	+ 2.7	+ 6,746	12	255,264	4	248,518	4
Ford	+ 2.3	+ 17,379	13	765,933	2	748,554	2
Cadillac	− 4.5	− 532	14	11,234	18	11,766	18
Plymouth	− 7.5	− 37,312	15	462,268	3	499,580	3
Hudson	− 9.3	− 9,269	16	90,027	10	99,296	8
Graham	− 14.6	− 2,452	17	13,987	17	16,439	14
Chevrolet	− 17.4	−162,210	18	768,040	1	930,250	1
Auburn-Cord	− 57.2	− 1,730	19	1,292	19	3,022	19
Hupmobile	− 74.5	− 1,160	20	396	20	1,556	20
Pierce-Arrow	− 79.0	− 621	21	166	21	787	21
Miscellaneous	− 83.0	− 6,999		1,441		8,440	
Total	+ 2.3	+ 79,255		3,483,752		3,404,497	

Makers' Volume Gains

List of Passenger Car Manufacturers in Order of VOLUME of SALES, 1937-1936

Make	12 Mos., 1937	1937 Position	12 Mos., 1936	1936 Position	Unit Gain or Loss	Pct. Gain or Loss
Chevrolet	768,040	1	930,250	1	−16,221	− 17.4
Ford	765,933	2	748,554	2	+17,379	+ 2.3
Plymouth	462,268	3	499,580	3	−37,312	− 7.5
Dodge	255,264	4	248,518	4	+ 6,746	+ 2.7
Pontiac	212,400	5	171,669	6	+50,731	+ 29.5
Buick	205,304	6	160,687	7	+44,617	+ 27.7
Oldsmobile	188,302	7	178,488	5	+ 9,814	+ 5.5
Packard	95,446	8	68,772	9	+26,674	+ 38.8
Chrysler	91,624	9	58,698	11	+32,926	+ 56.0
Hudson	90,027	10	99,296	8	− 9,269	− 9.3
De Soto	74,421	11	45,088	12	+29,333	+ 65.0
Nash	70,568	12	43,070	13	+27,498	+ 63.8
Studebaker	70,054	13	67,835	10	+ 2,219	+ 3.3
Willys	51,418	14	12,423	17	+38,995	+313.8
LaSalle	28,906	15	13,992	16	+14,914	+106.5
Lincoln	25,242	16	15,567	15	+ 9,675	+ 62.1
Graham	13,987	17	16,439	14	− 2,452	− 14.6
Cadillac	11,234	18	11,766	18	− 532	− 4.5
Auburn-Cord	1,292	19	3,022	19	− 1,730	− 57.2
Hupmobile	396	20	1,556	20	− 1,160	− 74.5
Pierce-Arrow	166	21	787	21	− 621	− 79.0
Miscellaneous	1,441		8,440		− 6,999	− 83.0
Total	3,483,752		3,404,497		+79,255	+ 2.3

AGAIN PLYMOUTH GOES FORWARD AGAINST THE TREND!

YOU DON'T HAVE TO GO very far back into Plymouth's history to find an outstanding example of the *fighting resourcefulness* that has always enabled Plymouth to make its greatest gains when others found the going toughest. Go back only a few months.

In the price-conscious 1938 market, Plymouth turned the limelight on its lowest-priced line. It was christened the Plymouth "Roadking"—a name really befitting the car—and an avalanche of great advertising was centered on the $685 Plymouth "Roadking" five-passenger sedan.

When this "Roadking" campaign got under way in newspapers, general magazines and farm publications—when Major Bowes applied to it his great persuasive power on millions of radio listeners—there was *action* in Plymouth salesrooms!

• • •

THE EFFECT WAS ELECTRICAL! People telephoned. People came in. Dealers and salesmen found themselves face to face with new buyers—met them with new energy and confidence. The sales thermometer climbed steadily. Sales clear across the country stepped up week after week. Plymouth history was being repeated—Plymouth going forward against the trend of the industry.

By late spring, Plymouth sales led the whole industry in more than a score of the biggest markets—and Plymouth seized second place in half again as many other leading cities and in nine states!

Fine products . . . strategic merchandising . . . aggressive use of the big guns of advertising . . . prestige founded on keeping faith with public and dealers—these combined to make Plymouth again forge ahead against the trend.

And every Plymouth dealer allied with these great business forces has the double advantage of greater market coverage by also handling one of the other Chrysler Corporation lines—Dodge, De Soto or Chrysler.

PLYMOUTH DIVISION OF CHRYSLER CORPORATION, DETROIT.

PLYMOUTH DIVISION OF THE CHRYSLER CORPORATION

Who's Who

(Continued from Page 38)

L. Huly, pur. agt. Det. Rep.—Cincinnati Rubber Mfg. Co. (W. H. Reno), 317 Curtis bldg.

CINCINNATI SHAPER CO., Elam, Hopple & Garrard sts., Cincinnati, O. Shapers, horizontal crank operated; brakes, all-steel, shears. Perrin G. March, pres.; Harry S. Robinson, secy., sales mgr.; Perrin G. March, treas.; Ralph S. Diserens, engr.; Harry Fenner pur. agt. Det. Rep.—Addy & Luby Mchy. Co., 8316 Woodward ave.

C. I. T. CORP., One Park ave., New York, N. Y. Instalment financing. A. O. Dietz, pres.; C. H. Paxton, J. Field, M. R. Sanborne, S. T. Beatie, A. G. Rude, J. S. Reilly, R. Seymour, H. G. Fink, N. Smith, M. Link, vice-pres.; G. K. Hubbard jr., secy.; W. F. Clarke, treas. Det. Rep.—C. I. T. Corp., 59 Cadillac Sq. Adv. Agcy.—Lord and Thomas, 247 Park ave., New York City.

CLARKSPEED TRAILER CO., R.F.D. 2, Box 769, Lansing, Mich. Trailer coaches, special commercial trailers. F. G. Clark, pres., treas.; A. A. Clark, secy.

CLARK TRUCTRACTOR, Division of Clark Equipment Co., Battle Creek, Mich. Industrial tractors, lift trucks, tiering machines, conveyors. E. W. Clark, sales mgr.; E. J. Dunham, engr.; D. E. Leech, pur. agt. Det. Rep.—C. E. Staninger, 1701 Fisher bldg. Adv. Agcy.—R. Marshall, Advertising, 6553 Woodward ave., Detroit, Mich.

CLAYTON & LAMBERT MFG. CO., 11111 French rd., Detroit, Mich. Sheet metal stampings. Charles F. Lambert, pres., gen. mgr.; Elroy O. Jones, Henry E. Beyster, vice-pres.; Renville Wheat, secy.; Charles F. Lambert, treas.; P. O. Mulkey, sales mgr., heat

(Continued on Next Page)

NEW PASSENGER CAR REGISTRA

MONTHS		CHRYSLER GROUP					FORD GROUP			GENERAL MOTORS GROUP						
		Chrysler	De Soto	Dodge	Plymouth	Totals	Ford	Lincoln	Totals	Buick	Cadillac	Chevrolet	LaSalle	Oldsmobile	Pontiac	Totals
January	'37	6544	5075	21972	43438	77029	67188	1773	68961	15207	1150	56130	2224	15198	16191	106100
	'36	3666	2325	15240	29922	51153	50744	801	51545	9169	856	62992	714	11552	9377	94660
February	'37	5921	4927	20866	39611	71325	61832	1700	63532	6122	565	29661	884	6792	8735	52759
	'36	2785	1763	11105	23577	39230	43724	699	44423	6651	637	53310	568	9363	7848	78377
March	'37	9229	8005	28732	50601	96567	85850	2512	88362	16784	1015	77502	2932	18482	19828	136543
	'36	5006	3270	21180	41186	70642	69271	1016	70287	13100	1027	87541	1040	17633	14559	134900
April	'37	7737	6244	19607	32195	65783	98414	2996	101410	23222	1410	95022	3365	23525	24773	171317
	'36	6652	4286	28395	55679	95012	86298	1400	87698	18956	1310	111853	1448	24682	20122	178371
May	'37	9390	7825	27183	49242	93640	94007	2795	96802	21851	1466	83222	3309	22308	24246	156402
	'36	6603	4655	27832	55637	94727	85208	1367	86575	17950	1209	109598	1394	23956	20406	174513
June	'37	9181	7555	26207	48461	91404	85113	2373	87486	21172	1131	70353	2957	21039	22705	139357
	'36	5915	5280	26841	54009	92045	80527	1243	81770	16174	1035	102949	1097	21556	19537	162348
July	'37	8876	7712	27099	49661	93348	85130	2321	87451	20997	969	75468	3060	20702	23354	144550
	'36	5612	5360	25270	50507	86749	79703	1297	81000	15118	1005	96883	1007	19023	18139	151175
August	'37	8408	7435	24019	43730	83592	54751	2206	56957	18344	998	71211	2742	17563	20916	131774
	'36	4175	3665	19415	37860	65115	58212	1031	59243	11173	900	72526	843	12684	12537	110663
September	'37	7000	5596	16981	31255	60832	50136	1784	51920	11752	657	57579	1861	11694	14951	98494
	'36	3131	2654	14725	28576	49086	53247	1102	54349	5329	782	54369	866	8514	9027	78887
October	'37	6973	4867	16981	24395	53216	36142	1343	37485	16038	613	46477	2136	10854	13817	89935
	'36	2551	2418	14777	30357	50103	45723	1779	47502	8693	613	28252	502	3944	6760	48764
November	'37	6792	5204	14817	26913	53726	15512	1422	16934	18609	622	59104	1928	10724	12912	103899
	'36	4809	3541	18505	42726	69581	27694	1696	29390	16200	968	63094	1433	4591	12694	98980
December	'37	5571	3979	10794	22766	43110	31858	2018	33876	15199	635	46311	1511	9425	9975	83056
	'36	7512	5624	23733	46677	83546	63367	2067	65434	21485	1385	80552	3039	19727	19405	145593
12 Months Total	'37	91622	74424	255258	462268	883572	765933	25243	791176	205297	11231	768040	28909	188306	212403	1414186
	'36	58698	45088	248518	499580	851884	74855	15567	764121	160687	11766	930250	13992	178488	171669	1466852

*Included in Miscellaneous. †Included in Hudson total.

NEW COMMERCIAL CAR REGISTRATIONS BY STATES

		Alabama	Arizona	Arkansas	California	Colorado	Connecticut	Delaware	Florida	Georgia	Idaho	Illinois	Indiana	Iowa	Kansas	Kentucky	Louisiana	Maine	Maryland	Massachusetts	Michigan	Minnesota	Mississippi	Missouri	Montana	Nebraska
January	'37	668	324	734	1997	649	562	156	1125	1290	249	3754	1520	959	874	686	911	472	584	946	2210	1015	779	1812	458	485
	'36	749	287	704	1602	778	456	108	1091	1142	331	3034	932	1001	1028	791	677	370	396	1118	1867	961	507	1744	676	587
	'35	526	252	616	1305	458	328	87	761	844	166	1899	675	1000	1039	669	406	262	371	823	1444	772	418	1276	277	385
	'34	609	157	123	1029	431	263	89	797	556	93	688	509	838	619	295	395	171	292	728	1081	538	227	387	40	368
February	'37	919	240	668	2340	693	305	129	957	1228	245	2598	1162	775	1035	583	543	268	486	1092	1765	767	548	1834	285	512
	'36	766	235	1338	1842	599	300	128	615	1319	212	2229	1362	835	870	988	747	196	417	912	1943	748	566	2072	379	575
	'35	564	198	683	1660	577	332	112	681	858	184	986	2063	736	728	736	463	314	456	851	1446	728	347	1545	363	544
	'34	561	122	465	1000	348	259	67	714	608	105	774	1245	479	643	166	202	152	271	834	1224	463	218	979	231	419
March	'37	1192	288	1690	3752	714	763	170	1016	1909	369	2922	1774	1369	979	768	838	440	863	2012	1832	1478	1101	2742	474	532
	'36	989	306	904	1557	536	613	155	764	1260	428	3274	1532	1187	1003	962	753	328	624	965	1450	1469	882	2505	559	716
	'35	653	200	450	2469	331	517	128	827	1022	339	2016	1381	1093	1004	730	417	210	505	1293	1685	1168	479	1867	606	561
	'34	575	197	666	1527	331	423	81	840	687	240	1484	1112	1053	792	1008	300	247	377	1157	1283	979	388	2005	287	430
April	'37	2042	376	976	3476	839	901	222	1275	886	606	3144	2010	1463	1486	836	932	701	817	2025	2105	1848	1169	2216	557	755
	'36	1188	250	859	3711	898	657	222	965	1294	568	3052	3640	1615	1313	1311	857	680	884	1994	2777	1474	934	1936	668	863
	'35	857	127	501	2524	404	719	132	670	1020	405	2278	1291	1326	871	847	487	554	592	1513	1234	1161	544	1353	478	623
	'34	625	122	457	1940	535	711	140	549	742	305	1737	1074	978	646	574	371	480	527	1583	1402	916	453	1320	349	667
May	'37	1264	407	912	3818	788	1001	235	824	1165	447	2942	2713	1228	1174	2643	845	789	838	1877	2491	1605	1270	1657	527	652
	'36	955	482	698	3941	876	600	226	719	1145	483	2991	1608	1347	1133	1366	728	676	795	1732	2886	1712	895	1710	617	670
	'35	702	372	700	2968	488	776	145	668	932	474	1973	1437	1163	902	842	536	660	613	1741	2071	1687	477	1444	512	577
	'34	471	253	318	1893	421	745	133	546	722	325	1712	1117	793	671	598	487	865	544	1584	1834	884	401	1412	469	474
June	'37	1015	381	493	4110	792	889	201	662	1300	438	2605	1573	1024	1049	1184	879	924	780	1863	2363	840	893	1391	661	525
	'36	1032	268	292	3621	809	1331	157	518	1290	484	2504	1947	1130	1064	667	867	770	660	1779	1884	1281	823	1633	590	535
	'35	459	318	322	3075	561	693	124	380	1110	457	1944	3235	1163	822	666	877	468	865	1645	2445	1003	406	1229	855	508
	'34	445	161	218	1737	402	638	109	371	753	277	1431	889	665	518	717	410	527	461	1337	1845	620	364	1029	310	437
July	'37	1192	176	1707	3565	908	637	167	865	1344	346	2777	1634	1110	1452	1165	978	458	710	1436	3131	1628	1164	1702	330	725
	'36	1044	345	1494	3550	1016	1163	166	941	1358	426	3328	1603	1143	1685	914	1078	472	792	1526	2487	1688	871	2219	368	788
	'35	892	317	1303	182	3037	658	697	751	1235	365	2289	1738	1012	1179	819	1005	332	850	1246	1842	1530	697	1588	508	807
	'34	710	192	620	89	1965	534	623	569	679	188	1804	1132	769	894	488	477	367	496	1043	1313	854	612	1032	512	463
August	'37	1407	390	1359	3611	913	605	206	802	1467	593	2430	1493	1011	1291	1074	1137	351	717	1306	2324	1094	1651	1693	620	575
	'36	1224	263	947	3389	972	683	164	885	1519	595	2751	1971	1144	1238	1004	1237	397	692	1094	2031	1181	1587	1786	893	691
	'35	880	324	795	2775	641	707	151	669	1267	476	1944	2644	1087	799	1018	768	282	567	1171	1872	1252	764	1528	850	590
	'34	250	469	814	2424	556	556	94	529	782	336	1686	974	931	611	667	548	289	462	1089	1827	758	883	1120	805	568
September	'37	972	465	778	3357	736	618	138	737	1203	444	2547	1797	1059	1304	1029	1252	578	655	1232	2383	1162	1179	1652	533	527
	'36	721	365	817	3544	921	565	134	918	1140	624	2638	2295	1001	806	856	1055	693	677	1377	2357	1131	1076	1651	623	627
	'35	712	239	755	2484	524	609	95	615	788	479	1655	2166	983	709	728	690	362	410	1100	1664	1073	680	1405	684	510
	'34	713	185	569	2038	482	530	93	540	692	377	1948	1087	731	516	675	906	441	569	1015	1317	984	690	1057	519	553
October	'37	933	248	983	2848	705	549	91	863	640	329	1899	1139	735	876	509	836	296	536	1046	1164	903	546	1134	393	386
	'36	1591	225	903	2684	575	655	65	862	713	358	2056	1140	672	530	549	687	287	541	1011	1531	993	890	1213	365	372
	'35	1343	217	644	2508	477	651	138	730	791	312	1650	1643	850	606	632	770	273	511	1341	1611	986	610	1232	504	454
	'34	1056	193	624	1954	502	617	101	826	793	268	1645	1360	994	555	620	571	367	608	1185	1321	1040	545	1218	420	477
November	'37	779	165	361	2040	329	500	67	513	366	227	1139	663	581	548	327	387	225	354	734	1305	608	403	717	152	264
	'36	1866	153	358	1707	450	533	67	560	495	207	1055	780	506	563	392	374	235	369	867	1470	627	308	858	138	275
	'35	1662	214	409	2340	383	699	59	679	698	215	1146	1203	776	413	670	498	240	532	1339	1965	817	689	1037	229	429
	'34	1058	171	317	1559	311	481	48	855	552	201	1305	806	625	419	502	389	263	296	805	901	586	389	855	212	374
December	'37	491	199	175	1987	346	437	100	1083	200	161	1698	791	1135	562	572	573	156	423	666	1476	607	473	620	54	267
	'36	1062	331	171	2508	630	684	131	574	266	223	2211	1217	1418	344	899	693	233	535	975	2157	879	1028	815	54	297
	'35	724	376	254	2152	638	643	108	1078	479	134	2223	1020	1393	607	760	619	163	532	828	1932	738	468	879	85	326
	'34	414	164	114	1430	343	278	71	910	355	102	909	584	709	286	505	303	93	554	527	933	633	244	532	61	181

TIONS, 1937-1936, MAKES BY MONTH

MONTHS		HUD. GROUP			AUBURN			NON-AFFILIATED GROUP								
		Terra-plane	Hudson	Totals	Auburn	Cord	Totals	Graham	Hupp	Nash	Packard	Pierce-Arrow	Stude-baker	Willys	Miscel-laneous	TOTALS
January	'37	†	8548	8548	*	*	*	968	*	4583	6559	*	4923	2573	441	280685
	'36	4661	1752	6413	201		201	892		2595	3030	56	3943	707	580	215775
February	'37	†	7380	7380	*	*	*	901	*	4210	6588	*	4704	3339	301	215049
	'36	3727	1236	4963	175	7	182	798		1839	2424	48	3199	781	387	176651
March	'37	†	10131	10131	*	*	*	1313	*	7250	10310	*	7656	5329	277	363738
	'36	6324	1920	8244	184	82	266	1290		3657	4739	72	5703	799	640	301239
April	'37	†	7933	7933	*	*	*	1636	*	9312	12611	*	8794	5916	239	384951
	'36	9888	2809	12697	278	148	426	1654		5043	6690	100	7775	994	726	397186
May	'37	†	9293	9293	*	*	*	1450	*	8725	11400	*	7805	5929	251	391697
	'36	9535	2611	12146	284	169	453	2021		5171	6302	71	7657	1309	1799	392744
June	'37	†	9894	9894	*	*	*	1404	*	7618	10074	*	7040	5737	222	360236
	'36	8802	1987	10789	167	162	329	1837		4568	5518	58	7187	1539	1434	369422
July	'37	†	9452	9452	*	*	*	1431	*	7411	9076	*	6717	6117	214	365767
	'36	8146	1792	9938	148	147	295	1873		4135	4955	69	5327	1508	1107	348131
August	'37	†	8330	8330	*	*	*	1315	*	6465	7649	*	5378	5242	256	306958
	'36	5728	1309	7037	98	140	238	1282		2885	5762	80	2556	1126	489	256476
September	'37	†	5528	5528	*	*	*	1281	*	4460	4795	*	4475	3626	272	235683
	'36	4156	980	5136	91	88	179	1076		1998	5979	67	4675	999	620	203051
October	'37	†	4275	4275	*	*	*	925	*	3191	5584	*	4855	3150	282	202898
	'36	3424	957	4381	83	91	174	1059		2134	8459	62	7208	969	581	171397
November	'37	†	4966	4966	*	*	*	573	*	3664	5727	*	4194	2497	289	196469
	'36	5381	1453	6834	83	51	134	1070	10	3351	6963	54	5739	556	898	223560
December	'37	†	4303	4303	*	*	*	787	*	3682	5082	*	3507	1956	262	179621
	'36	8197	1913	10110	52	87	139	1468		5051	7529	46	6564	1126	697	327303
12 Months Total	'37	†	90043	90043	*	*	*	13984	*	70571	95455	*	70048	51411	3306	3483752
	'36	78371	20825	99296	1848	1174	3022	16439		43070	68772	787	67835	12423	9996	3404497

Who's Who

(Continued from Previous Page)

tool div., adv. mgr.; Leo C. Williams, sales mgr., sheet metal div.; Wm. Summers, engr.; H. P. Vrooman, pur. agt.

CLEMENT, J. W. CO., Buffalo, N. Y. Printing and advertising literature. John D. Taylor, pres.; Philip J. Kuhn, secy.; William D. Rosser, sales mgr. **Det. Rep.**—W. E. Biggers, 1001 Covington dr.

CLEVELAND AUTOMATIC MACHINE CO., 2269 Ashland rd., Cleveland, O. Screw machines, automatic, multiple and single spindle chucking machines, multiple and single spindle. Walter F. Brown, pres.; A. L. Patrick, exec. vice-pres., treas.; Herbert E. Nunn, vice-pres. in chge. of sales; J. C. Wattleworth, vice-pres. in chge of mfg.; C. W. Cowdrey, sales mgr.; Geo. A. Collier, pur. agt. **Det. Rep.**—L. A. Willard, 2842 W. Grand blvd., Curtis bldg.

CLEVELAND CAP SCREW CO., 2917 E. 79th st., Cleveland, O. Cap screws, set screws, bolts and nuts, special headed and threaded products. J. W. Fribley, pres.; Y. J. Hardlicka, secy.; C. M. Prell, treas.; Wm. G. Uhler, sales mgr.; W. C. Cooke, pur. agt. **Det. Rep.**—C. E. Saunders, 501 Curtis bldg. **Adv. Agcy.**—John C. Stephan, Leader bldg., Cleveland, O.

CLEVELAND CHAIN & MFG. CO., Broadway and Henry sts., Cleveland, O. Tire, tractor, tow chains. Louis D. Cull, secy.-treas., gen. mgr.; D. J. Gemmell, sales mgr.; Bruce W. Vasey, adv. mgr.; T. E. Round, pur agt. **Det. Rep.**—Geo. E. Quigley, General Motors bldg.

CLEVELAND ELECTRO METALS CO.,

(Continued on Page 43)

AND MONTHS FROM 1934 THROUGH DECEMBER 1937

		Nevada	New Hampshire	New Jersey	New Mexico	New York	North Carolina	North Dakota	Ohio	Oklahoma	Oregon	Pennsylvania	Rhode Island	South Carolina	South Dakota	Tennessee	Texas	Utah	Vermont	Virginia	Washington	West Virginia	Wisconsin	Wyoming	Dist. of Col.	Total
January	'37	52	217	1284	428	4291	1405	162	2170	695	506	2668	195	534	172	2722	923	255	160	879	638	520	1136	165	214	47609
	'36	73	193	1206	390	3602	1121	162	2080	825	497	1993	142	393	267	3281	936	182	114	723	820	518	919	202	184	43760
	'35	103	94	828	323	3004	1485	150	2034	847	288	1592	83	408	220	651	2643	213	98	714	514	405	693	151	159	34759
	'34	50	74	549	170	2217	958	75	1114	675	189	1354	74	347	75	439	1424	128	55	464	295	254	433	88	79	22903
February	'37	72	170	1307	284	2967	772	92	2060	912	386	2978	191	539	121	551	2885	260	139	764	447	517	984	184	256	41815
	'36	82	131	814	292	2293	795	96	1904	1338	479	2402	192	457	126	533	2951	252	116	725	542	576	680	176	156	40301
	'35	50	138	885	192	2142	816	140	1599	937	262	1980	145	436	180	803	2838	266	142	718	447	490	733	156	147	34797
	'34	49	130	578	181	1776	593	95	1279	767	189	1667	138	296	77	440	1750	119	72	461	224	411	448	70	117	24476
March	'37	99	264	1915	239	4010	1105	200	3864	1076	713	3446	254	775	237	1226	3506	335	127	1162	1161	805	1213	273	299	60291
	'36	141	278	1506	233	3259	1120	166	3374	1373	717	3027	184	666	279	2110	3213	341	85	1091	987	687	1478	135	257	52428
	'35	61	196	1183	150	2931	818	237	1835	870	417	2720	185	474	273	697	2794	293	154	752	665	489	1005	176	185	41511
	'34	39	222	924	143	2371	572	179	1581	701	298	2144	175	383	143	334	2415	252	135	596	432	406	681	140	149	33884
April	'37	86	307	1949	507	4431	1951	355	3299	1655	905	4253	357	759	313	1638	4362	335	424	1615	1114	1017	2050	210	329	67884
	'36	117	427	1749	577	4430	1523	293	2820	1634	837	3879	343	604	239	1225	2824	359	314	1566	1209	983	1795	250	349	64956
	'35	95	267	1302	340	3653	1591	351	2232	1083	472	3065	243	430	213	819	3131	263	266	1273	823	666	1319	169	208	46785
	'34	56	359	1194	319	2965	1153	323	2138	847	354	3007	244	371	116	728	2126	206	213	706	557	545	854	145	153	38882
May	'37	225	392	2157	370	4404	1505	314	3004	1420	908	4112	329	719	375	1181	3620	299	289	1645	1098	937	1883	270	289	65857
	'36	146	407	1782	339	4325	1274	281	2809	1343	838	4997	283	584	311	901	4053	286	352	1619	978	944	1802	268	270	62183
	'35	64	377	1382	268	3558	837	308	1933	948	786	3026	265	436	416	991	2492	308	303	1309	1008	465	1280	141	207	47968
	'34	58	402	1192	217	3345	868	239	2029	816	362	3001	270	380	242	530	2244	179	291	1341	554	518	773	129	179	39831
June	'37	144	364	1865	349	3467	1346	223	2640	1549	935	3987	294	686	301	1235	4005	244	250	1376	1094	1473	1491	250	225	58628
	'36	111	383	1569	220	3119	979	272	2599	1242	899	4567	289	459	335	849	4204	434	334	1373	1038	1185	1896	267	292	56851
	'35	102	281	1402	377	3327	1044	352	1783	831	609	2679	188	460	251	798	2513	310	329	1143	894	858	1681	174	227	48243
	'34	60	331	1099	115	2731	686	148	1932	608	353	2903	195	257	136	312	2364	207	237	700	478	807	1121	153	174	34778
July	'37	109	318	1896	800	4639	1603	372	2477	1671	862	3072	290	706	225	966	3898	344	276	1081	1180	888	2235	248	223	61686
	'36	128	295	1805	635	4530	2067	336	2841	1510	986	3471	236	567	350	956	3691	397	227	1086	1178	1107	2260	273	298	63695
	'35	125	226	1287	617	3702	1430	380	2107	995	757	2400	191	519	295	946	2956	508	213	791	1158	701	1643	185	232	51243
	'34	64	254	1188	360	3096	910	179	1710	940	530	2286	201	286	220	526	2103	226	182	686	1018	646	1119	182	153	37490
August	'37	94	256	1597	730	3439	1773	526	2458	1854	793	4048	212	773	305	956	4293	405	220	1127	1181	873	2191	338	310	60872
	'36	141	215	1432	555	3057	1513	361	2931	1416	856	4497	256	522	285	975	3781	378	164	1240	1175	881	1694	283	276	59222
	'35	143	209	1233	551	3001	1358	480	2060	1302	662	3268	173	544	362	917	2827	344	262	1047	1109	642	1503	248	289	50355
	'34	56	201	1191	514	2707	936	271	2190	887	431	3426	146	327	284	926	2285	258	205	799	724	573	1028	200	197	40790
September	'37	129	236	1415	356	3042	1432	343	2296	1370	774	3409	243	643	210	842	4214	297	165	1161	893	826	1595	283	200	54711
	'36	119	352	1581	281	3110	1180	299	2637	1336	716	3720	222	662	269	839	3450	329	154	1094	1011	748	1333	293	264	54611
	'35	226	318	999	111	2733	1364	266	1797	1053	540	2813	179	577	288	795	2714	402	182	947	726	518	1063	285	219	43234
	'34	251	332	1051	39	2181	1109	239	1871	825	293	2778	156	383	316	475	2082	360	143	680	616	421	962	200	235	37225
October	'37	86	178	1093	529	2888	1145	347	1505	1034	528	2517	193	482	212	518	2935	233	140	837	593	536	813	150	167	40246
	'36	84	205	1197	416	3155	1098	222	1877	885	474	2794	208	377	224	609	2103	278	161	904	631	529	906	190	225	41220
	'35	157	318	1100	44	3684	1183	269	2124	948	476	2846	192	345	248	800	2763	303	130	975	752	622	858	181	441	43243
	'34	242	302	1151	64	3137	1915	474	1871	777	361	2958	169	412	318	810	2463	269	166	890	493	544	813	198	221	40878
November	'37	43	136	842	257	2366	502	164	1256	688	256	1792	107	384	115	422	2069	169	109	573	243	372	538	109	196	27462
	'36	33	145	893	221	2151	648	95	1775	654	266	2265	137	425	118	563	2197	174	112	619	264	363	644	131	149	30256
	'35	62	166	923	261	2686	893	148	1915	965	354	2534	147	467	143	833	2227	164	151	822	294	470	653	104	212	36935
	'34	73	206	728	326	2232	744	107	1230	582	202	1849	152	515	217	497	2020	193	195	791	205	399	628	147	171	28689
December	'37	28	184	1126	240	1978	1152	95	1411	778	293	2868	84	257	73	341	2396	122	145	708	580	505	497	147	149	31409
	'36	35	165	1401	386	2128	968	97	2427	1181	485	4307	102	375	159	566	3155	161	175	864	833	660	830	193	220	42208
	'35	48	156	859	351	2212	1075	72	1782	1179	446	3509	126	427	141	546	3161	172	170	1071	903	481	736	299	177	39258
	'34	30	59	599	171	1625	741	60	1571	519	218	2518	115	271	108	349	1578	133	154	394	603	323	453	147	151	24125

New Passenger Car Registrations, 1930-1937, Showing Percentage Of Each State to Total Registration

States	1937 Registrations	% Total	1936 Registrations	% of Total	1935 Registrations	% of Total	1934 Registrations	% of Total	1933 Registrations	% of Total	1932 Registrations	% of Total	1931 Registrations	% of Total	1930 Registrations	% of Total	Eight Year Average	Average % Over 8 Yrs.
Alabama	34,936	1.02	35,198	1.03	29,407	1.07	25,560	1.35	14,514	.97	8,375	.76	15,428	.88	25,535	.97	23,618	1.02
Arizona	12,562	.36	12,758	.37	9,694	.35	6,472	.34	3,625	.24	2,529	.23	5,400	.28	8,985	.34	7,750	.33
Arkansas	19,793	.58	19,612	.58	17,828	.65	15,757	.85	11,626	.78	7,094	.63	9,699	.35	19,303	.73	15,089	.65
California	246,075	7.15	256,255	7.53	196,967	7.18	116,121	6.14	98,068	.66	70,721	.64	134,478	7.04	184,312	7.01	162,875	5.42
Colorado	32,505	.93	35,721	1.05	26,055	.95	18,701	.99	11,739	.79	10,252	.03	18,277	.95	26,762	1.01	22,501	1.00
Connecticut	51,268	1.47	51,342	1.51	40,005	1.46	27,247	1.44	24,213	1.62	17,578	1.61	31,984	1.67	41,387	1.57	35,627	1.59
Delaware	9,748	.28	8,477	.25	7,119	.26	4,868	.26	4,119	.28	3,182	.29	5,160	.27	7,290	.27	6,245	.28
Florida	43,445	1.27	38,988	1.15	32,476	1.18	26,717	1.44	17,924	1.2	13,936	1.27	25,146	1.33	31,701	1.20	28,791	1.26
Georgia	48,823	1.40	43,581	1.28	38,270	1.39	33,235	1.76	24,119	1.64	14,153	1.29	24,915	1.30	27,634	1.05	31,773	1.4
Idaho	14,139	.41	14,438	.42	11,084	.40	7,216	.38	3,463	.23	2,109	.19	5,540	.29	10,265	.39	8,532	.36
Illinois	250,205	7.20	236,138	6.94	182,202	6.64	109,287	5.79	85,460	5.7	62,164	5.66	117,829	6.17	163,387	6.60	150,835	6.80
Indiana	123,972	3.50	116,280	3.42	91,029	3.33	53,147	2.84	40,176	2.69	29,202	2.66	53,009	2.72	69,878	2.66	72,086	3.08
Iowa	68,196	1.94	71,883	2.11	68,955	2.51	38,619	2.04	27,286	1.83	19,525	1.78	45,254	2.37	76,985	2.93	52,076	2.23
Kansas	56,315	1.62	54,041	1.59	49,665	1.81	32,935	1.74	24,238	1.62	14,789	1.34	28,282	1.48	44,779	1.75	38,130	1.66
Kentucky	41,391	1.18	40,109	1.18	35,762	1.30	25,889	1.37	20,316	1.36	14,092	1.28	26,373	1.38	34,658	1.31	29,823	1.29
Louisiana	34,084	.98	37,471	1.10	29,279	1.07	23,272	1.23	16,300	1.09	10,627	.96	17,593	.92	26,214	9.90	24,355	1.04
Maine	20,048	.58	17,890	.53	13.111	.48	11,573	.62	9,074	.64	7,908	.72	15,262	.79	18,003	.68	14,358	.62
Maryland	46,371	1.32	44,228	1.30	36,578	1.33	24,930	1.32	20,193	1.35	18,097	1.65	29,637	1.55	36,843	1.40	32,110	1.40
Massachusetts	115,603	3.29	117,261	3.44	90,123	3.29	70,536	3.73	63,248	4.23	50,804	4.63	87,158	4.51	104,329	3.97	87,382	3.90
Michigan	241,156	6.89	226,968	6.67	182,604	6.65	109,773	5.81	85,682	5.74	60,186	.54	96,005	5.03	138,559	5.27	142,615	5.33
Minnesota	82,874	2.36	81,773	2.40	65,458	2.39	37,573	1.99	30,829	2.06	24,626	2.24	46,683	2.44	66,790	2.54	54,576	2.30
Mississippi	22,646	.65	25,006	.73	19,226	.70	15,904	.84	10,628	.71	5,892	.53	9,547	.50	20,583	.78	16,179	.68
Missouri	89,965	2.58	87,740	2.58	74,915	2.73	55,585	2.94	45,773	3.06	39,018	3.55	60,766	3.18	86,335	3.28	67,512	3.00
Montana	18,062	.52	20,745	.61	17,405	.64	9,789	.52	6,056	.41	4,099	.34	8.041	.42	11,629	.44	11,978	.49
Nebraska	33,640	.96	37,695	1.11	34,227	1.25	21,778	1.15	16,393	1.4	11,260	1.29	25,185	1.31	41,345	1.57	27,690	1.25
Nevada	4,767	.14	5,255	.15	3,547	.13	2,457	.13	1,328	.09	1,326	.12	2,393	.12	3,463	.13	3,067	.13
New Hampshire	12,961	.38	12,258	.36	9,988	.36	7,911	.42	6,597	.44	5,467	.49	9.933	.52	10,804	.41	9,490	.42
New Jersey	122,103	3.46	111,737	3.28	86,049	3.14	61,061	3.23	56,438	3.78	48,339	4.48	83,097	4.35	98,093	3.73	83,364	3.68
New Mexico	10,781	.38	10,881	.32	8,311	.30	6,298	.33	3.716	.25	2,334	.21	3,916	.20	7,123	.27	6,671	.28
New York	329,951	9.49	303,323	8.91	242,505	8.84	179,335	9.5	175,763	11.77	148,322	13.55	232,860	12.14	266,122	10.10	234,791	10.54
North Carolina	55,341	1.58	49,364	1.45	55,990	2.04	45,951	2.43	29,191	1.95	15,280	1.39	28,088	1.47	33,768	1.28	39,121	2.0
North Dakota	12,060	.34	11,095	.32	12,612	.46	7,693	.41	5,263	.35	3,959	.36	7,411	.38	12,861	.48	9,107	.40
Ohio	250,192	7.19	244,865	7.19	180,388	6.57	128,445	6.8	101,213	6.78	64,961	5.92	111,880	5.86	158,329	6.02	155,035	6.54
Oklahoma	51,580	1.48	56,605	1.66	53,116	1.94	39,377	2.09	28,914	1.94	17,027	1.55	23,750	1.24	53,198	2.02	40,446	1.74
Oregon	35,915	1.06	40,460	1.19	25,749	.94	14,309	.76	10,123	.68	6,491	.59	14,218	.74	22,111	.84	21,172	.85
Pennsylvania	293,909	8.45	273,281	8.03	201,936	7.36	147,165	7.79	121,425	8.13	95,340	8.69	150,866	7.96	199,252	7.56	185,397	8.0
Rhode Island	20,499	.59	19,309	.57	14,810	.54	11,835	.63	10,749	.72	7,958	.72	13,833	.72	15,722	.59	14,339	.63
South Carolina	26,959	.77	24,020	.71	23,419	.85	19,896	1.05	14,591	.98	6,811	.62	14,321	.75	18,622	.79	18,580	.82
South Dakota	12,728	.36	13,556	.40	13,531	.49	7,197	.38	4,849	.32	4,001	.36	9,349	.48	18,382	.70	10,450	.44
Tennessee	42,320	1.22	41,959	1.23	38,447	1.40	28,077	1.49	19,880	1.33	11,696	1.06	23,138	1.21	37,711	1.43	30,405	1.3
Texas	150,093	4.30	157,995	4.64	138,726	5.06	106,622	5.64	80,447	5.39	44,594	4.06	71,139	3.72	119,915	4.56	108,691	4.68
Utah	14,358	.41	14,398	.42	10,825	.39	6,887	.36	4,704	.31	2,729	.24	5,731	.30	10,201	.38	8,729	.35
Vermont	8,799	.25	8,413	.25	7,187	.26	4,892	.26	3,774	.25	4,062	.37	6,559	.34	8,772	.33	6,557	.20
Virginia	50,768	1.45	50,346	1.48	45,813	1.67	31,372	1.66	22,180	1.48	20,813	1.90	37,491	1.96	44,652	1.70	37,929	1.66
Washington	49,699	1.42	54,458	1.60	36,685	1.34	23,120	1.22	16,633	1.11	11,471	1.04	22,046	1.10	37,915	1.44	31,503	1.28
West Virginia	35,679	1.02	37,272	1.09	26,083	.95	22,029	1.17	15,326	1.02	10,166	.92	18,931	.99	28,447	1.08	24,242	1.03
Wisconsin	97,241	2.75	89,569	2.63	72,568	2.64	41,008	2.17	28,308	1.89	25,410	2.30	47,322	2.47	72,143	2.70	59,196	2.44
Wyoming	8,968	.26	9,693	.28	7,170	.26	4,513	.29	2,945	.23	2,367	.21	4,120	.21	4,834	.18	5,575	.24
District of Columbia	28,257	.81	32,787	.96	29,009	1.06	18,523	.98	14,375	.96	13,257	1.21	23,098	1.24	20,047	.76	22,419	1.0
Total	**3,483,752**	**100%**	**3,404,497**	**100%**	**2,743,908**	**100%**	**1,888,557**	**100%**	**1,493,794**	**100%**	**1,096,399**	**100%**	**1,908,141**	**100%**	**2,625,979**	**100%**	**2,330,628**	**100%**

New Commercial Car Registrations, 1930-1937, Showing Percentage Of Each State to Total Registration

States	1937 Registrations	% Total	1936 Registrations	% of Total	1935 Registrations	% of Total	1934 Registrations	% of Total	1933 Registrations	% of Total	1932 Registrations	% of Total	1931 Registrations	% of Total	1930 Registrations	% of Total	Eight Year Average	Average % Over 8 Yrs.
Alabama	12,874	2.1	13,187	2.16	9,925	1.94	8,051	1.99	4,054	1.64	1,982	1.09	3,536	1.12	6,186	1.50	7,474	1.8
Arizona	3,659	.59	3,510	.57	3,126	.61	2,167	.53	1,086	.44	566	.31	1,295	.41	1,899	.46	2,163	.54
Arkansas	10,836	1.75	9,485	1.55	7,383	1.45	4,960	1.25	3,638	1.07	1,467	.81	2,613	.83	3,478	.84	5,483	1.2
California	36,901	5.97	33,656	5.50	28,943	5.67	20,496	5.07	13,788	5.60	10,732	5.94	19,992	6.37	26,930	6.56	23,930	5.84
Colorado	8,411	1.36	9,060	1.48	6,086	1.19	5,196	1.28	2,488	1.01	2,001	1.10	3,887	1.23	5,840	1.42	5,371	1.26
Connecticut	7,767	1.26	8,240	1.35	7,318	1.43	6,124	1.52	4,246	1.71	3,056	1.69	5,540	1.76	5,928	1.44	6,027	1.52
Delaware	1,882	.31	1,723	.28	1,425	.28	1,115	.27	828	.33	597	.33	967	.30	1,205	.29	1,218	.4
Florida	10,722	1.73	9,412	1.54	8,274	1.62	8,046	1.99	4,186	1.72	2,894	1.60	5,255	1.67	6,121	1.49	6,864	1.68
Georgia	12,998	2.10	12,941	2.12	10,887	2.13	7,921	1.93	5,260	2.13	2,544	1.41	4,779	1.52	4,998	1.34	7,791	1.85
Idaho	4,454	.72	4,939	.81	4,004	.78	2,817	.69	1,545	.62	673	.36	1,620	.51	2,389	.58	2,805	.67
Illinois	30,451	4.92	31,123	5.09	23,046	4.51	17,584	4.36	11,764	4.78	7,863	4.35	14,786	4.71	20,037	4.88	19,582	4.72
Indiana	18,269	2.95	20,027	3.27	18,009	3.53	11,123	.27	6,121	2.48	4,849	2.68	9,025	2.87	10,534	2.56	12,244	2.58
Iowa	12,449	2.01	12,999	2.13	12,754	2.50	9,860	2.44	5,449	2.21	4,154	2.30	7,899	2.51	10,038	2.45	9,450	2.32
Kansas	12,409	2.00	11,406	1.86	9,605	1.88	7,170	1.77	4,292	1.74	3,119	1.72	5,550	1.77	9,298	2.26	7,856	1.88
Kentucky	11,597	1.88	10,870	1.78	9,089	1.78	6,815	1.68	4,195	1.70	2,819	1.56	4,326	1.37	5,366	1.30	6,885	1.64
Louisiana	10,111	1.63	9,753	1.60	7,201	1.41	5,359	1.32	2,882	1.17	1,844	1.02	4,311	1.37	4,705	1.14	5,771	1.34
Maine	5,658	.92	5,337	.87	4,104	.80	4,262	1.05	2,614	1.06	2,240	1.24	4,600	1.46	4,521	1.16	4,167	1.09
Maryland	7,763	1.26	7,382	1.21	6,657	1.30	5,457	1.35	3,818	1.55	2,953	1.63	4,864	1.55	6,038	1.47	5,617	1.42
Massachusetts	16,235	2.62	15,350	2.51	14,514	2.84	12,887	3.19	9,511	3.86	7,290	4.04	12,609	4.01	13,711	3.34	12,628	3.38
Michigan	24,549	3.97	24,840	4.06	21,104	4.13	16,281	4.03	9,085	3.69	6,402	3.60	10,722	3.41	15,818	3.85	16,100	3.85
Minnesota	13,555	2.19	14,144	2.31	12,740	2.49	9,255	2.30	5,722	2.32	4,858	2.69	7,580	2.41	10,292	1.50	9,768	2.28
Mississippi	11,176	1.82	10,367	1.70	6,573	1.29	5,414	1.24	2,752	1.12	1,476	.81	2,137	.68	5,518	1.34	5,677	1.25
Missouri	19,170	3.2	20,142	3.29	16,200	3.17	12,920	3.19	8,535	3.47	7,645	4.23	10,979	3.49	14,844	3.63	12,804	3.48
Montana	5,044	.82	5,930	.97	5,939	1.16	4,215	1.04	2,055	.83	1,150	.63	1,874	.50	2,596	.63	3,600	.82
Nebraska	6,202	1.0	6,996	1.14	6,297	1.23	5,411	1.34	2,713	1.11	2,108	1.11	4,540	1.44	6,957	1.69	5,153	1.36
Nevada	1,167	.19	1,210	.20	1,006	.20	638	.15	233	.09	320	.17	648	.20	635	.14	732	.27
New Hampshire	3,022	.49	3,196	.52	2,490	.49	2,731	.67	1,783	.72	1,152	.13	2,038	.64	2,290	.55	2,338	.63
New Jersey	18,446	2.98	16,935	2.77	13,165	2.58	11,444	2.83	7,401	3.01	7,505	4.15	13,051	4.16	14,764	3.59	12,839	3.36
New Mexico	5,089	.82	4,545	.74	4,058	.79	3,150	.77	1,395	.57	817	.45	1,560	4.09	2,006	.48	2,828	1.28
New York	41,922	6.78	39,159	6.40	35,805	7.01	30,383	7.52	20,200	8.21	19,943	11.05	32,876	10.04	38,951	.94	33,650	7.35
North Carolina	15,691	2.53	14,286	2.34	13,835	2.71	11,185	2.79	6,597	2.68	3,620	2.01	6,821	2.17	6,483	1.09	9,815	2.50
North Dakota	3,193	.52	2,680	.44	3,144	.62	2,389	.59	1,107	.45	786	.43	1,436	.45	2,419	.59	2,144	.57
Ohio	28,440	4.6	30,028	4.91	22,772	4.46	20,487	1.07	11,150	4.53	8,753	4.85	14,207	4.52	20,111	4.89	19,493	4.34
Oklahoma	14,702	2.37	14,737	2.41	11,768	2.30	8,944	2.24	4,941	2.01	2,594	1.43	4,060	1.29	8,112	1.97	8,732	2.3
Oregon	7,859	1.27	8,050	1.32	5,964	1.17	3,780	.93	2,488	1.01	1,451	.80	3,099	.98	4,193	1.02	4,611	1.05
Pennsylvania	39,159	6.33	41,919	6.85	32,097	6.32	29,891	.74	19,991	8.13	15,618	8.65	23,396	7.45	30,120	7.33	29,023	6.5
Rhode Island	2,749	.44	2,594	.42	2,088	.41	2,035	.51	1,598	.65	1,152	.63	2,027	.64	2,116	.50	2,045	.52
South Carolina	7,257	1.17	6,091	1.00	5,481	1.07	4,228	1.04	2,604	1.05	1,213	.67	2,959	.95	3,709	.90	4,193	1.5
South Dakota	2,659	.43	2,962	.48	3,020	.59	2,252	.55	996	.41	704	.39	1,673	.53	3,093	.75	2,170	.52
Tennessee	10,799	1.74	11,062	1.81	9,518	1.86	6,366	1.57	3,623	1.06	2,031	1.12	3,285	1.04	5,087	1.23	6,471	1.42
Texas	40,905	6.62	38,903	6.36	32,437	6.35	24,854	6.15	13,889	5.64	8,819	4.88	15,742	5.01	22,237	5.40	24,723	5.8
Utah	3,298	.53	3,571	.58	3,498	.68	2,530	.62	1,568	.62	758	.42	1,591	.50	2,218	.54	2,380	.58
Vermont	2,444	.40	2,308	.38	2,394	.47	2,048	.52	1,311	.53	972	.53	1,339	.42	1,670	.40	1,811	.46
Virginia	12,928	2.2	12,904	2.11	11,402	2.23	8,508	2.11	5,667	2.30	4,105	2.27	6,823	2.11	8,917	2.17	8,907	2.2
Washington	10,222	1.65	10,666	1.50	9,076	1.78	6,199	1.53	4,002	1.58	2,471	1.36	4,640	1.47	6,680	1.62	6,745	1.58
West Virginia	9,269	1.5	9,181	1.50	6,646	1.30	5,847	1.44	2,988	1.21	1,844	1.02	3,552	1.13	4,551	1.10	5,485	1.28
Wisconsin†	16,462	2.65	16,237	2.65	13,118	2.57	9,313	2.31	5,411	2.20	4,522	2.50	8,399	2.67	12,058	2.93	10,684	2.56
Wyoming	2,627	.43	2,661	.44	2,206	.43	1,799	.44	937	.37	613	.33	1,174	.37	1,182	.28	1,650	.39
District of Columbia	2,857	.46	2,940	.48	2,492	.49	1,979	.49	1,362	.55	1,368	.75	2,202	.71	1,850	.45	2,131	.55
Total	**618,249**	**100%**	**611,644**	**100%**	**510,683**	**100%**	**403,886**	**100%**	**245,869**	**100%**	**180,413**	**100%**	**313,884**	**100%**	**410,669**	**100%**	**411,912**	**100%**

†Estimated by AN.

Who's Who

(Continued from Page 41)

W. 38th st. and Nickel Plate R. R., Cleveland, O. Aluminum ingots, zinc, aluminum and zinc die and permant-mold castings. John W. Brown, pres.; Henry S. Narten, vice-pres.; H. Austin Hauxhurst, secy.; John W. Brown, treas.

CLEVELAND GRAPHITE BRONZE CO., 880 E. 72nd st., Cleveland, O. Automobile bearings and bushings, precision bearings, thrust washers, clutch facings, spring lining. Ben F. Hopkins, pres.; J. J. McIntyre, vice-pres.; James L. Myers, secy.-treas.; Carl W. Johnson, sales mgr.; John V. O. Palm, chief engr.; A. G. Mould, pur. agt.; George S. Salzman, works mgr. **Det. Rep.**—Carl W. Johnson, 7-169 General Motors bldg.

CLEVELAND HARDWARE AND FORGING CO., 3270 E. 79th st., Cleveland, O. Automotive forgings, truck body forgings, die castings. T. P. Robbins, chmn., treas.; A. J. Sanford, pres., gen. mgr., secy.; Dr. Geo. Crile, vice-pres.; A. O. S. Allan, sales mgr.; M. E. Lubahn, pur. agt. **Det. Rep.**—C. J. Edwards Co., 2209 Fisher bldg.

CLEVELAND PNEUMATIC TOOL CO., 3734 E. 78th, Cleveland, O. Pneumatic tools, chippers, riveters, sandrammers, drills, grinders, valves, couplings, miscellaneous air accessories, shock absorbers for trucks and buses. L. W. Greve, pres.; H. W. Foster, vice-pres.; A. F. Barner, secy.; J. DeMooy, treas., gen. mgr.; R. E. Ahern, sales mgr.; E. L. Oldham, adv. mgr.; P. Van Sittert, J. F. Wallace, engr.; A. F. Barner, pur. agt. **Det. Rep.**—C. D. Garner, 601 Insurance Exchange bldg.

CLEVELAND PUNCH & SHEAR WORKS CO., 3917 St. Clair ave., Cleveland, O. Power presses, fabricating tools, small tools. W. D. Sayle, pres.; W. C. Sayle, vice-pres., gen. mgr.; H. C. Sayle, vice-pres., metalurgist; H. J. Corrin, secy., sales mgr.; A. C. Eckert, treas.; W. J. Stewart, adv. mgr.; W. F. Longfield, engr.; J. M. Berry, pur. agt. **Det. Rep.**—R. S. Howell, 4-259 General Motors bldg.

CLEVELAND STEEL PRODUCTS CORP., Madison at W. 74th st., Cleveland, O. Drive shafts, universal joints. J. C. Hipp, pres.; W. J. Smith, vice-pres.; T. J. Smith, secy.; A. R. Seagar, treas.; George Rakovan, adv. mgr.; W. W. Slaght, engr.; C. V. Banwell, pur. agt.; H. F. Braun, supt. **Det. Rep.**—H. A. Cutting, C. D. Cutting, 2970 W. Grand blvd.

CLIMAX MOLYBDENUM CO., 500 Fifth ave., New York, N. Y. Calcium molybdate, ferro-molybdenum, molybdenum trioxide. Max Schott, pres.; W. P. Woodside, C. M. Loeb jr., J. B. Thorpe, vice-pres.; A. K. West, adv. mgr. **Det. Rep.**—V. A. Crosby, 14410 Woodrow Wilson ave. **Adv. Agcy.**—N. W. Ayer & Son, Philadelphia, Pa.
(See display advertising index)

CLOYES GEAR WORKS, 17214 Roseland rd., N.E., Cleveland, O. Replacement timing gears, timing chain sprockets and couplings, commercial gears. R. T. Cloyes, owner, engr.; O. T. Hillshafer, sales mgr., adv. mgr.; Jane Cloyes, pur. agt.; L. A. Sellers, supt. **Det. Rep.**—B. A. Johnston, General Motors bldg.

CLUM MFG. CO., 601 W. National ave., Milwaukee, Wis. Choke and throttle controls, lighting switches, ignition switches, fender lamps, clutch cable controls, fuse blocks, junction blocks, car heater switches. Harlow H. Pease, pres., treas.; Robert K. Winning, vice-pres., eng.; Chester H. Roberts, pur. agt. **Det. Rep.**—Phillip W. Kridler, 401 Lexington bldg.

COGSDILL TWIST DRILL CO., Inc., 6511 Epworth blvd., Detroit, Mich. Twist drills, center drills, reamers, cutters, mills and special metal cutting tools to drawing. S. A. Cogsdill, pres., gen. mgr.; R. G. Lambe, vice-pres., sales mgr., adv. mgr.; G. M. Bennett, secy.-treas.; P. C. Satterthwaite, engr., pur. agt.; J. F. Bunetta, gen. supt.

COLE, HENRY-F. C. HERSEE COMPANIES, 54 Old Colony ave., Boston, Mass. Electrical and automotive equipment. Leo Mayer, pres., treas.; Charles W. F. O'Connor, vice-pres.; Wilner H. Wyman, engr.; James McGill, pur. agt. **Det. Rep.**—W. H. Cochran, P. O. Box 55, Redford Station.

COLEMAN LAMP AND STOVE CO., Second and St. Francis sts., Wichita, Kan. Gasoline lamps and lanterns, oil heaters and gas floor furnaces. W. C. Coleman, chmn., pres.; Chas. Parr, Sheldon Coleman, Ralph Carney, G. M. Tilford, vice-pres.; C. B. Kuhn, secy.; R. R. Sterling, treas.; Chas. Parr, gen. mgr.; Ralph Carney, sales mgr.; A. W. Boyer, adv. mgr.; Tilman Jones, engr.; H. H. Minard, pur. agt. **Adv. Agcy.**—Ferry-Hanly Co., 3200 Fidelity Bank bldg., Kansas City, Mo.

COLLINS & AIKMAN CORP., 200 Madison ave., New York, N. Y. Mohair velvets and other types of automobile upholstery fabrics. M. G. Curtis, chmn.; W. G. McCullough, pres.; C. B. Rockwell, vice-pres., treas.; P. J. Torchiana, P. H. Chance, vice-pres.; C. M. Willon, secy.; P. B. Baldwin, gen. sales mgr.; J. Weemhoff, asst. gen. sales mgr.; M. F. Schmitt, adv. mgr.; W. F. Bird, engr.; S. C. Lukens, pur. agt. **Det. Rep.**—Automotive Materials Corp., 23rd floor, Fisher bldg. **Adv. Agcy.**—Arthur Kudner, Inc., 630 Fifth ave., New York City.

COLUMBIA AXLE CO., 850 E. 72nd st., Cleveland, O. Front and rear axles, overdrive axles, transmissions, misc. products. John K. MacGowan, chmn.; Geo. G. Soderberg, pres.; N. S. Lincoln, vice-pres.; R. S. Pruitt, secy.; M. E. Dank, treas.; G. W. Harper, engr.; R. R. Braggins, pur. agt.; T. A. Galliitte, fcty. mgr. **Det. Rep.**—N. S. Lincoln, 11 McLean. **Adv. Agcy.**—McCann-Erickson, Detroit, Mich.

COLUMBIA ENAMELING & STAMPING CO., Inc., Terre Haute, Ind. Trailer sinks and lavatories, porcelain enameled ware. C. B. Gorby, pres.; W. H. Grabbe, vice-pres., secy., gen. mgr.; C. B. Gorby, treas.; O. C. Thomas, sales mgr.; R. C. Weddle, adv. mgr.; A. W. Nelson, engr.; K. O. Uran, pur. agt. **Det. Rep.**—W. P. McKane, 428 Islington st., Toledo, O.

COLUMBIAN VISE & MFG. CO., 9021 Bessemer ave., Cleveland, O. Clamps "C", drop forged, bodymakers' vises, all kinds. Dan C. Swander, pres., gen. mgr.; H. F. Seymour, vice-pres., secy., sales mgr., adv. mgr.; Albert F. Munhall, treas.; A. S. Trivison, pur. agt. **Adv. Agcy.**—Bayless-Kerr Co., Cleveland, O.

COLUMBUS AUTO PARTS CO., Hudson st. and Penna. R. R., Columbus, O. Drag links, tie rods, upset forgings. R. E. Klages, pres., gen. mgr.; R. D. Klages, vice-pres.; E. B. Haag, secy.-treas. **Det. Rep.**—The Columbus Auto Parts Co., Fisher bldg.

COLUMBUS McKINNON CHAIN CORP., Tonawanda, N. Y. Claw and dreadnaught tire chains, Niagara farm tractor chains, claw and twin emergency chains. Franz T. Stone, pres.; A. L. McKinnon, D. S. Brisbin, vice-pres.; A. G. Holden, secy.-treas.; R. E. Gerspacher, sales mgr., adv. mgr.; Al Cotesworth, engr.; Frank Stahl, pur. agt. **Det. Rep.**—R. S. Crotty, 74 W. Warren ave. **Adv. Agcy**—Addison Vars, Inc., Buffalo, N. Y.
(See display advertising index)

COLUMBUS METAL PRODUCTS, Inc., 767 N. 4th st., Columbus, O. Fog lamps, dome lamps, marker lamps, clearance lamps, spot lamps, bus ventilators. G. Edwin Smith, pres.; Thomas Ash, secy.; L. C. Hanson, treas.; H. B. Donley, gen. mgr.; B. E. Tarches, sales mgr.; Howard Yerges, engr.; H. B. Donley, pur. agt. **Det. Rep.**—H. B. Stillman jr., 612 Stephenson bldg. **Adv. Agcy.**—Harry M. Miller Co., Columbus, O.

COMMERCIAL CREDIT CO., First National Bank bldg., Baltimore, Md. Financing. A. E. Duncan, chmn.; W. H. Grimes, vice-chmn.; H. L. Wynegar, pres.; E. C. Warheim, exec. vice-pres.; H. B. Mathews, vice-pres.; H. E. Spears, vice-pres, compt.; W. Bruce Wylie, vice-pres.; E. E. Heaton, secy.; W. L. Gardiner, treas.; H. M. Benson, F. M. Nicodemus, G. P. Hopkins, Charles J. Zimmer, vice-pres. **Det. Rep.**—F. G. Murphy, asst. vice-pres., 7310 Woodward ave. **Adv. Agcy.**—O'Deal, Sheldon & Canaday, Inc., 400 Madison ave., New York, N. Y.

COMMONWEALTH BRASS CORP., 5781-5835 Commonwealth ave., Detroit, Mich. Brass tube and pipe fittings, radiator valves, gas engine trimmings, machined products from brass forgings, rod and castings. N. A. Henwood, pres., gen. mgr.; D. Dwight Douglas, vice-pres.; L. J. Bulkley, secy.-treas.; P. Tazelaar, sales mgr.; B. V. Unwin, adv. mgr.; C. S. Kellum, engr.; H. R. Keever, pur. agt. **Adv. Agcy.**—Unwin Advg. Agcy., 5144 14th st., Detroit.

CONGRESS TOOL & DIE CO., 8211 Collins ave., Detroit, Mich. Stamping dies, jigs and fixture, zinc base alloy die castings, die casting machinery, single V groove pulleys, flexible motor couplings. Wm. Tann, pres., gen. mgr.; Herman Tann, vice-pres., sales mgr., adv. mgr.; David Tann, secy., engr., pur. agt.

CONNECTICUT TELEPHONE & ELEC. CORP., 70 Britannia st., Meriden, Conn. Automotive parts and accessories, truck, bus and automobile directional signals. C. W. Colby, vice-pres., gen. mgr.; A. B. Chace, vice-pres. in chge. of pur., pur. agt.; C. A. Cunneen, secy.-treas.; Geo. Lundquist, sales mgr., automotive div.; R. L. Hirschfeld, adv. mgr.; W. R. Curtiss, engr. **Det. Rep.**—C. O. Spillman jr., 2457 Woodward ave. **Adv. Agcy.**—R. L. Hirschfeld, 478 E. Main st., Meriden, Conn.

CONTEST BOARD OF THE AMERICAN AUTOMOBILE ASSN., Mills bldg., Pennsylvania ave. at 17th st., Washington, D. C. E. V. Rickenbacker, chmn.; Thos. P. Henry, pres. of Amn. Auto. Assn.; T. E. Allen, secy. **Det. Rep.**—J. Edward Schipper, Schipper Associates, 1235 Lafayette bldg.

CONTINENTAL CAN CO., Inc., 100 E. 42nd st., New York, N. Y. Cans and containers for motor oils and greases. C. C. Conway, chmn., O. C. Huffman,
(Continued on Page 45)

WANT A MARKET THAT BUYS 1 OUT OF EVERY 15 NEW CARS?

Here are 968,000 men* at the height of their buying power . . .

With an annual income of 2½ BILLION dollars★

They own 847,014 automobiles□ . . . and 154,873 trucks☆

655,928 of the automobiles were bought NEW

156,570	bought cars	1937
174,410	NEW IN	1936

LOW PRICED CARS | MEDIUM PRICED | HIGH PRICED

They drive their cars an average of 11,887 miles per year

11,887 MILES

Making a replacement market for 1,846,286 tires▼ annually . . .

And 5,538,858 spark plugs✻ annually

They ALL read The American LEGION Magazine■

Yes, all 968,000 of them●

- * Each man represents 100,000 men, 95% of whom are aged 36 to 55 years.
- ★ Each $ represents $100,000,000 annual income.
- □ Each auto represents 75,000 autos. ☆Each truck represents 25,000 trucks.
- ▼ Each tire represents 100,000 tires.
- ✻ Each spark plug represents 200,000 spark plugs.
- ■ Each reader represents 100,000 readers of your advertising.
- ● Each house represents 100,000 homes where The American LEGION Magazine has unique reader interest and loyalty (and note the garages attached!)

All facts are based on Ross Federal Research Report, May 31, 1938

And when they set out to spend their 2½ BILLION dollars, sold by your advertisements in The American LEGION Magazine, you'll say

"MAN, THAT'S LEGIONPOWER!"

For full information, write

THE AMERICAN
LEGION
MAGAZINE

9 Rockefeller Plaza, New York City

U. S. Motor Vehicle Registrations, 1895-1937

(Figures as of December 31)

(Compiled by Automobile Manufacturers Assn.)

Years	PASSENGER CARS Number	PASSENGER CARS % Change	MOTOR TRUCKS Number	MOTOR TRUCKS % Change	TOTAL MOTOR VEHICLES Number	TOTAL MOTOR VEHICLES % Change
1895	4	....	.....	....	4	....
1896	16	....	.....	....	16	....
1897	90	....	.....	....	90	....
1898	800	....	.....	....	800	....
1899	3,200	....	.....	....	3,200	....
1900	8,000	....	.....	....	8,000	....
1901	14,800	85	.....	....	14,800	85
1902	23,000	55	.....	....	23,000	55
1903	32,920	43	.....	....	32,920	43
1904	54,590	66	410	....	55,000	67
1905	77,400	42	600	46	78,000	42
1906	105,900	37	1,100	83	107,000	37
1907	140,300	33	1,700	55	142,000	33
1908	194,400	38	3,100	82	197,500	39
1909	305,950	57	6,050	95	312,000	58
1910	458,500	50	10,000	65	468,500	50
1911	619,500	35	20,000	100	639,500	36
1912	902,600	46	41,400	107	944,000	48
1913	1,194,262	32	63,800	54	1,258,062	33
1914	1,625,739	36	85,690	34	1,711,339	36
1915	2,309,666	42	136,000	59	2,445,666	43
1916	3,297,996	43	215,000	58	3,512,996	44
1917	4,657,340	42	326,000	52	4,983,340	42
1918	5,621,617	21	525,000	61	6,146,617	23
1919	6,771,074	21	794,372	51	7,565,446	23
1920	8,225,859	22	1,006,082	27	9,231,941	22
1921	9,346,195	14	1,117,100	11	10,463,295	13
1922	10,862,650	16	1,375,725	23	12,238,375	17
1923	13,479,608	24	1,612,569	17	15,092,177	23
1924	15,460,649	15	2,134,724	32	17,595,373	17
1925	17,496,420	13	2,440,854	14	19,937,274	13
1926	19,237,171	10	2,764,222	13	22,001,393	10
1927	20,219,224	5	2,914,019	5	23,133,243	5
1928	21,379,125	6	3,113,999	7	24,493,124	6
1929	23,121,589	8	3,379,854	8	26,501,443	8
1930	23,059,262	—1/3	3,486,019	3	26,545,281	16
1931	22,366,313	—3	3,466,571	—6	25,832,884	—2.5
1932	20,885,814	—6.6	3,229,315	—7	24,115,129	—6.7
1933	20,616,234	—1.2	3,227,357	—.06	23,843,591	—1.19
1934	21,532,408	4.04	3,419,254	5.9	24,951,662	4.31
1935	22,583,420	4.9	3,647,474	6.7	26,230,834	5.1
1936	24,197,685	7.1	4,023,606	9.9	28,221,291	7.6
1937	25,449,924	5.4	4,255,296	6.9	29,705,220	5.5

Tax-Exempt Official Cars Not Included in the Official Registrations[1]

Year	U. S. Cars†	State and Local	Total	Year	U. S. Cars†	State and Local	Total
1927	33,179	101,689	134,868	1932	36,475	143,666	180,141
1928	33,179	103,618	136,797	1933	‡79,996	177,370	213,845
1929	33,179	118,828	152,007	1934	‡94,503	191,512	271,508
1930	33,179	140,440	173,619	1935	36,475	189,454	283,957
1931	*29,154	143,096	172,250	1936	‡99,038	200,230	299,268
				1937	104,792	231,280	336,072

*From Government reports, 1932. †U. S. Budget Bureau figures. ‡Source: Procurement Division, U. S. Treasury Dept.
[1]Some states require government-owned vehicles to pay registration fees same as privately-owned vehicles. In such states the government-owned vehicles are included among the regular registrations in above table.

New Motor Vehicle Registrations, 1929-1937

NEW PASSENGER CAR REGISTRATIONS IN U. S.

	1929	1930	1931	1932	1933	1934	1935	1936	1937
Jan.	219,760	180,094	126,776	87,493	79,845	61,242	136,635	215,775	280,685
Feb.	235,590	211,645	134,133	82,813	69,471	94,887	170,615	176,651	215,049
Mar.	377,802	298,824	200,841	92,192	78,749	173,287	261,477	301,239	363,738
April	481,675	357,064	265,732	121,093	119,972	223,050	319,650	397,186	384,951
May	454,132	345,031	247,727	131,282	160,225	219,225	293,199	392,744	391,697
June	386,398	260,861	201,911	148,752	174,219	223,864	280,360	369,422	360.236
July	432,503	254,098	194,322	104,188	185,700	229,006	285,178	357,490	365,767
Aug.	376,886	203,737	155,744	93,457	178,935	193,198	233,851	262,912	306,958
Sept.	304,452	175,286	124,903	81,893	157,834	146,931	157,098	208,896	235,683
Oct.	288,697	150,219	102,659	63,195	136,075	140,937	148,389	171,397	202,898
Nov.	183,756	93,066	75,829	44,358	94,145	107,574	220,262	223,732	196,469
Dec.	138,555	96,054	77,564	45,683	58,624	75,356	237,194	327,053	179,621
Total	3,880,206	2,625,979	1,908,141	1,096,399	1,493,794	1,888,557	2,743,908	3,404,497	3,483,752

NEW TRUCK REGISTRATIONS IN U. S.

	1929	1930	1931	1932	1933	1934	1935	1936	1937
Jan.	29,900	30,236	24,415	14,776	11,709	22,903	34,759	43,760	47,618
Feb.	32,637	31,880	23,466	14,558	9,707	24,476	34,797	40,301	41,843
Mar.	46,368	42,199	30,609	16,874	9,934	33,884	41,511	52,428	60,301
April	56,299	47,029	36,848	17,784	17,301	38,882	46,785	64,956	67,832
May	52,874	43,286	33,496	18,696	20,925	39,831	47,968	62,183	65,857
June	45,114	33,531	28,496	17,876	23,254	34,778	48,243	56,851	58,626
July	57,943	39,904	30,102	14,731	30,642	37,490	51,243	63,695	61,686
Aug.	52,557	33,787	27,070	15,081	28,799	40,790	50,355	59,222	60,872
Sept.	46,560	33,933	25,967	14,967	31,269	37,225	41,390	54,611	54,711
Oct.	49,899	34,237	24,685	15,156	28,058	40,878	37,439	41,220	40,246
Nov.	33,631	22,012	15,553	10,392	18,691	28,689	36,935	30,255	27,248
Dec.	23,275	18,665	13,177	9,522	15,580	24,060	39,258	42,162	31,409
Total	527,057	410,699	313,884	180,413	245,869	403,886	510,683	611,644	618,249

COMBINED CAR AND TRUCK REGISTRATIONS IN U. S.

	1929	1930	1931	1932	1933	1934	1935	1936	1937
Jan.	249,660	210,330	151,191	102,269	91,554	84,145	171,394	259,535	328,203
Feb.	268,227	243,525	157,599	97,371	79,178	119,363	205,412	216,952	256,892
Mar.	424,070	341,023	231,450	109,066	88,683	207,171	302,988	353,667	424,039
April	537,974	404,093	302,580	138,877	137,273	261,932	366,437	462,142	452,783
May	507,006	388,317	281,223	149,978	181,150	259,056	341,169	454,927	457,554
June	431,512	294,392	230,407	166,628	197,473	258,642	328,603	426,273	418,362
July	490,446	294,002	224,424	118,919	216,342	266,496	336,438	421,185	427,453
Aug.	429,443	237,524	182,814	108,538	207,734	233,988	284,206	322,134	367,830
Sept.	351,012	209,219	150,870	96,860	189,103	184,156	198,488	263,507	290,394
Oct.	338,596	184,456	127,344	78,351	164,133	181,815	185,828	212,617	243,144
Nov.	217,387	115,078	91,382	54,750	112,836	136,263	257,197	253,987	223,717
Dec.	161,830	114,719	90,741	55,205	74,204	99,416	276,452	369,215	211,030
Total	4,102,001	4,407,263	3,036,678	2,222,025	1,276,812	1,739,663	2,292,443	3,254,612	4,016,141

New Passenger Car Registrations by States, 1932-1937

	1937	1936	1935	1934	1933	1932
Alabama	34,936	35,198	29,407	25,560	14,514	8,375
Arizona	12,562	12,758	9,694	6,472	3,625	2,529
Arkansas	19,793	19,612	17,828	15,757	11,626	7,094
California	246,075	256,255	196,967	116,121	98,068	70,721
Colorado	32,505	35,721	26,055	18,701	11,739	10,252
Connecticut	51,268	51,342	40,005	27,347	24,213	17,578
Delaware	9,748	8,477	7,119	4,868	4,119	3,182
Florida	43,445	38,988	32,476	26,717	17,924	13,936
Georgia	48,823	43,581	38,270	33,235	24,119	14,153
Idaho	14,139	14,438	11,084	7,216	3,463	2,109
Illinois	250,205	236,138	182,202	109,287	85,460	62,164
Indiana	123,972	116,280	91,029	53,147	40,176	29,202
Iowa	68,196	71,883	68,955	38,619	27,286	19.525
Kansas	56,315	54,041	49,665	32,935	24,238	14,789
Kentucky	41,391	40,109	35,762	25,889	20,316	14,092
Louisiana	34,084	37,471	29,279	23,272	16,300	10,627
Maine	20,048	17,890	13,111	11,573	9,074	7,908
Maryland	46,371	44,228	36,578	24,930	20,193	18,097
Massachusetts	115,603	117,261	90,123	70,536	63,248	50,804
Michigan	241,156	226,968	182,604	109,773	85,682	60,186
Minnesota	82,874	81,773	65,458	37,573	30,829	24,626
Mississippi	22,646	25,006	19,226	15,904	10,628	5,892
Missouri	89,965	87,740	74,915	55,585	45,773	39,018
Montana	18,062	20,745	17,405	9,789	6,056	4,099
Nebraska	33,640	37,695	34,227	21,778	16,393	11,260
Nevada	4,767	5,255	3,547	2,457	1,328	1,326
N. Hampshire	12,961	12,258	9,988	7,911	6,597	5,467
New Jersey	122,103	111,737	86,049	61,061	56,438	48,339
New Mexico	10,781	10,881	8,311	6,298	3,716	2,334
New York	329,951	303,323	242,505	179,335	175,763	148,322
North Carolina	55,341	49,364	55,990	45,951	29,191	15,280
North Dakota	12,060	11,095	12,612	7,693	5,263	3,959
Ohio	250,192	244,865	180,388	128,445	101,213	64,961
Oklahoma	51,580	56,605	53,116	39,377	28,914	17,027
Oregon	35,915	40,460	25,749	14,309	10,123	6,491
Pennsylvania	293,909	273,281	201,936	147,165	121,425	95,340
Rhode Island	20,499	19,309	14,810	11,835	10,749	7,958
South Carolina	26,959	24,020	23,419	19,896	14,591	6,811
South Dakota	12,728	13,556	13,531	7,197	4,849	4,001
Tennessee	42,320	41,959	38,447	28,077	19,880	11,696
Texas	150,093	157,995	138,726	106,622	80,447	44,594
Utah	14,358	14,398	10,825	6,887	4,704	2,729
Vermont	8,799	8,413	7,187	4,892	3,774	4,062
Virginia	50,768	50,346	45,813	31,372	22,180	20,813
Washington	49,699	54,458	36,685	23,120	16,633	11,471
West Virginia	35,679	37,272	26,083	22,029	15,326	10,166
Wisconsin	97,241	89,569	72,568	41,008	28,308	25,410
Wyoming	8,968	9,693	7,170	4,513	2,945	2,367
D. of Columbia	28,259	32,787	29,009	18,523	14,375	13,257
Yearly Totals	3,483,752	3,404,497	2,743,908	1,888,557	1,493,794	1,096,399

New Passenger Car Registrations By Makes, 1932-1937

	1937	1936	1935	1934	1933	1932
Chrysler Group						
Chrysler	91,624	58,698	40,536	28,052	28,677	26,016
De Soto	74,421	45,088	26,952	11,447	21,260	25,311
Dodge	255,264	248,518	178,770	90,139	86,062	28,111
Plymouth	462,268	499,580	382,985	302,557	249,667	111,926
Total	883,597	851,884	629,243	432,195	385,666	191,364
Ford Group						
Ford	765,933	748,554	826,519	530,528	311,113	258,927
Lincoln	25,242	15,567	2,370	2,061	2,112	3,179
Total	791,175	764,121	828,889	532,589	313,225	262,106
General Motors Group						
Buick	205,304	160,687	87,635	63,067	43,809	49,708
Cadillac	11,234	11,766	6,692	4,899	3,903	6,269
Chevrolet	768,040	930,250	656,698	534,906	474,493	322,860
La Salle	28,906	13,992	11,775	5,182	3,709	3,848
Oldsmobile	188,302	178,488	149,375	71,676	35,295	24,128
Pontiac	212,400	171,669	140,122	72,645	85,348	47,926
Total	1,414,186	1,466,852	1,052,297	752,375	646,557	454,739
Non-Affiliated Mfrs.						
Auburn-Cord	1,292	3,022	5,163	5,536	5,038	11,646
Austin	.....	.....	.....	1,057	3,675	2,520
Continental	.....	.....	.....	953	3,310	.....
Franklin	.....	.....	.....	360	1,329	1,829
Graham	13,987	16,439	15,965	12,887	10,128	12,858
Hudson	90,027	99,296	75,425	59,817	38,777	37,419
Hupp	396	1,556	7,450	6,566	6,726	10,794
Nash	70,568	43,070	35,184	23,616	11,353	20,233
Packard	95,463	68,772	37,653	6,552	9,081	11,058
Pierce-Arrow	166	787	875	1,740	2,152	2,692
Reo	.....	3,146	3,894	3,854	3,623	3,870
Studebaker	70,054	67,835	39,573	41,560	36,242	41,968
Willys	51,418	12,423	10,439	6,576	15,314	25,898
Miscellaneous	1,441	5,294	1,858	324	1,598	5,405
Total	394,812	179,274	122,870	87,965	98,216	130,538
Year Total	3,483,752	3,404,497	2,743,908	1,888,557	1,493,794	1,096,399

Who's Who

(Continued from Page 43)

pres.; F. G. Searle, vice-pres. in chge. of sales and adv.; J. B. Jeffress jr., secy.-treas.; H. A. Goodwin, adv. mgr. Det. Rep.—A. H. Green, sales mgr., 300 E. Jefferson st. Adv. Agcy.—Batten, Barton, Durstine & Osborn, 383 Madison ave., New York City.

CONTINENTAL MACHINE SPECIALTIES, Inc., 1301 S. Washington ave., Minneapolis, Minn. Contour sawing and filing machines, variable speed transmissions. L. A. Wilkie, pres.; R. J. Wilkie, vice-pres., gen. mgr.; F. Hooper, adv. mgr.; Irving Pratt, engr.; Wayne Hamlett, pur. agt.

CONTINENTAL MOTORS CORP., Detroit and Muskegon, Mich. Gas, gasoline and fuel oil engines, lighting plants, radio speakers. W. R. Angell, pres., treas., gen. mgr.; J. Reese, vice-pres., asst. gen. mgr.; B. F. Tobin jr., vice-pres. in chge. of sales; L. P. Kalb, vice-pres. in chge. of engr. and mfg. at Muskegon; Geo. M. Clark, secy.; F. Frank Schwilk, supvsr of sales; A. Wild, adv. mgr.; E. R. Jacoby, chief engr., Muskegon; N. N. Tilley, chief engr., Detroit; Geo. E. Winters, pur. agt., Muskegon; E. P. Gallagher, pur. agt., Detroit; L. Rich, fcty. mgr., Detroit. Adv. Agcy.—F. M. Lawrence, 1019 Fox Theatre bldg., Detroit, Mich.

(See display advertising index)

CONTINENTAL RUBBER WORKS, 19th and Liberty sts., Erie Pa. Aprons, belts, couplings, hose, discs, flaps, funnels, mallets, matting, nipples, patches, plugs, protectors, tape, tubing. Theron R. Palmer, pres.; Alexander Jarecki, vice-pres.; Paul H. Henkel, secy., gen. mgr.; Herman M. Reinecke, treas.; Mervyn M. Schade, asst. treas.; H. T. Fowler, sales mgr.; C. J. Palmer, adv. mgr.; A. Lansberry, engr.; F. R. McCarty, pur. agt. Det. Rep.—Continental Rubber Works, C. McNary, mgr., 5423 12th st.

COOK PAINT & VARNISH CO., 14th and Knox sts., Kansas City, Mo. Synthetic enamels, lacquers, paints and varnishes. Chas. R. Cook, pres.; J. F. Cash, vice-pres.; H. H. McLucas, treas. Det. Rep.—C. H. Whitelaw, J. R. Mosby. Factory Branch, 3301 Bourke.

COOPER MFG. CO., 411 S. First ave., Marshalltown, Ia. Automotive and industrial gaskets. A. R. Cooper, pres., gen. mgr.; Harold M. Cooper, secy.; Ralph Schmidt, sales mgr.; F. W. Zuercher, engr. Adv. Agcy. — Jas. R. Rhodes Associates, Newton, Ia.

CORBITT CO., Henderson, N. C. Motor trucks, trailers and bodies. R. J. Corbitt, chmn., gen. mgr., adv. mgr.; W. B. Payne, pres., sales mgr.; S. T. Peace jr., W. Z. Bush, P. J. T. Rawlins, R. G. Burwell, vice-pres.; J. E. Ellis, secy., pur. agt.; S. T. Peace sr., treas.; P. J. T. Rawlins, engr.

CORNELL FORGE CO., 1659 W. 74th st., Chicago, Ill. Drop forgings of carbon, alloy and stainless steel and monel metal. Arthur M. Cornell, pres., treas., gen. mgr., sales mgr., adv. mgr.; Alverin M. Cornell, vice-pres., engr., pur. agt.; A. G. McCaleb, secy. Det. Rep.—H. R. Brethen, 11341 Woodward ave.

COTAN CORP., 341 Oliver st., Newark, N. J. Rubber top material, radiator winter front material, tire covering material, auto curtain material, upholstery material, trailer interior and exterior material. J. T. Broadbent, pres.; C. T. Melvin, vice-pres.; G. V. Fortune, secy.-treas.; J. J. Smith, sales mgr.; D. D. LeFevre, rubber div.

COTTA TRANSMISSION CORP., 2340 11th st., Rockford, Ill. Heavy duty transmission, reduction gears. B. W. Maguire, pres.; L. C. Lundberg, secy.; A. D. Scoville, treas., gen. mgr., sales mgr., adv. mgr.; F. R. Nelson, engr.; W. Wishart, pur. agt. Adv. Agcy.—Howard H. Monk & Associates, Brown bldg., Rockford, Ill.

COVERED WAGON CO., 332 Cass ave., Mt. Clemens, Mich. Coach trailers. A. G. Sherman, chmn., pres.; D. R. Donaldson, vice-pres., engr.; James L. Brown, vice-pres., sales mgr.; E. G. Kolbe, secy.-treas.; Robt. Silbar, adv. mgr.; R. L. Warren, pur. agt. Det. Rep.—L. A. Schaldenbrand, 17800 Woodward ave. Adv. Agcy.—Aarons, Sill & Caron, Architects bldg., Detroit.

CRAINE SCHRAGE STEEL CO., 8701 Epworth blvd., Detroit, Mich. Cold rolled strip steel, cold drawn bars, tool steel, wire, alloy bars, hot rolled bars. C. P. Craine, pres.; A. A. Schrage, vice-pres.; W. C. Schrage, secy.-treas.

CRAMER, R. W. & CO., Inc., 67-69 Irving Place, New York, N. Y. Speed and time recorders, recording and indicating. R. W. Cramer, pres.; J. J. Gardner, secy.

CRANE PACKING CO., 1800 Cuyler ave., Chicago, Ill. Industrial and automotive styles of mechanical packing. F. E. Payne, pres.; A. W. Payne, vice-pres.; N. B. Carlton, automotive replacement sales mgr.

CRISSMAN, GLENN P. CO., 5680 12th st., Detroit, Mich. Casters, warehouse trucks and trailer jacks. G. P. Crissman, pres.; Rodney Pierce, D. N. Gatfield, vice-pres.; A. B. Pilon, treas.

CROWE NAME PLATE & MFG. CO., 3701 Ravenswood ave., Chicago, Ill. Instrument panels, dials, scuff plates, name plates, radio remote controls, escutcheons. E. C. Coolidge, pres.; W. W. Barry, vice-pres.; Martin Keagy, secy.; G. C. Hass, pur. agt. Det. Rep.—J. E. Eckenrode, 610 Stephenson bldg.

CROWN PRODUCTS CO., Ralston, Neb. Automotive belting; radiator, air, water hose; mechanical rubber goods. Glenn B. Williams, pres., treas., pur. agt.; E. B. Williams, vice-pres.; S. H. Williams, secy.; N. K. Kennedy, asst. secy.; T. P. Leonard, sales mgr.; F. J. Shively, engr.; V. Wilkerson, supt. Det. Rep.—B. G. Golden, 10 Louise ave., apt. 409. Adv. Agcy.—Bennett & Moore, Omaha, Neb.

CRUCIBLE STEEL CO. OF AMERICA, 405 Lexington ave., New York, N. Y. High speed steel, alloy and carbon tool steels, stainless steels, electric and open hearth steels, alloys and carbon steels, cold drawn and cold rolled specialties, machinery steels. F. B. Hufnagel, chmn.; R. E. Desvernine, pres.; J. M. McComb, asst. treas. and vice-pres.; A. T. Galbraith, vice-pres., gen. sales mgr.; H. L. Gellinger, vice-pres.; F. M. Barnes, asst. secy.; F. L. Cooper, treas.; R. E. Filsinger, pur. agt.; R. E. Christie, asst. gen. sales mgr. Det. Rep.—Crucible Steel Co. of America, 3245 Hubbard ave., R. W. Crane, mgr.

CURTIS PNEUMATIC MACHY. CO., 1993 Kienlen ave., St. Louis, Mo. Air compressors, automobile lifts, washers, air hoists, I-beam cranes and trolleys. E. H. Steedman, chmn.; Walter C. Hecker, pres.; F. Ackermann, vice-pres., wks. mgr.; Chas. Frees, secy.-treas.; J. D. Lodwick, sales mgr.; L. C. Blake, adv. mgr.; J. A. A. Hecker, pur. agt. Adv. Agcy.—Gardner Advertising Co., Mart bldg., St. Louis, Mo.

(See display advertising index)

CURTISS AEROCAR CO., Inc., Salzedo and Valencia, Coral Gables, Fla. Semi-trailers for living, touring, passenger-carrying and commercial purposes. H. C. Genung, pres.; H. H. Robinson, exec. vice-pres.; L. F. Mead, secy.; H. Sayre Wheeler, treas.; W. H. Euchner, sales mgr., adv. mgr.; H. A. Robinson sr., engr.; W. G. Griffith, pur. agt. Adv. Agcy.—Loomis and Hall, Congress bldg., Miami, Fla.

CURTISS & SMITH MFG. CORP., 700 Water st., Pottstown, Pa. Automotive maintenance tools. William H. Curtiss, pres., engr.; James L. McKenna, secy.; L. E. Orgill, treas., pur. agt.; Kenneth Howard, sales mgr.; George C. Lees, adv. mgr.

C. V. S. MFG. CO., Smith and Water sts., Flint, Mich. "Flint" spark plugs. A. R. Campbell, pres., sales mgr., adv. mgr.; G. E. Boysen, W. C. Durant, vice-pres.; A. R. Campbell, treas.; G. Braley, fcty. mgr.; G. R. Smith, engr.

D

DAIL STEEL PRODUCTS CO., 750 E. Main st., Lansing, Mich. Steel stampings, chemical toilets, air conditioning furnaces. E. I. Dail, pres., gen. mgr.; E. W. Goodnow, secy.; L. M. Crosby, stamping sales mgr., pur. agt.; E. T. Richardson, engr.; G. H. Palmer, supt.

DARDELET THREADLOCK CORP., 55 Liberty st., New York, N. Y. We license manufacturers throughout the United States and Canada to manufacture products with our patented "Dardelet Thread," and in return we receive a royalty on such threaded products. Arthur F. Hebard, pres.; Chas. J. Gass, Henry J. Kuehls, vice-pres.; Chas. J. Gass, secy.; Milton W. Blackmar, treas.; Charles G. Thoma, adv. mgr.; H. W. Cram, sales engr.; E. J. McManus, production engr.; Wm. J. McCune, mgr. order and tool dept. Det. Rep.—Joseph D. Stites, 424 Book bldg.

DAVEY COMPRESSOR CO., 266 N. Water st., Kent, O. Portable air compressors, truck power take-off compressors, tractor mounted units. Paul H. Davey, pres.; James A. G. Davey, M. L. Gibson, vice-pres.; K. W. Cooke, secy.; Paul H. Davey, treas.; M. L. Gibson, sales mgr.; A. C. Palm, adv. mgr.; W. W. Warner, engr.; W. C. Myers, pur. agt.

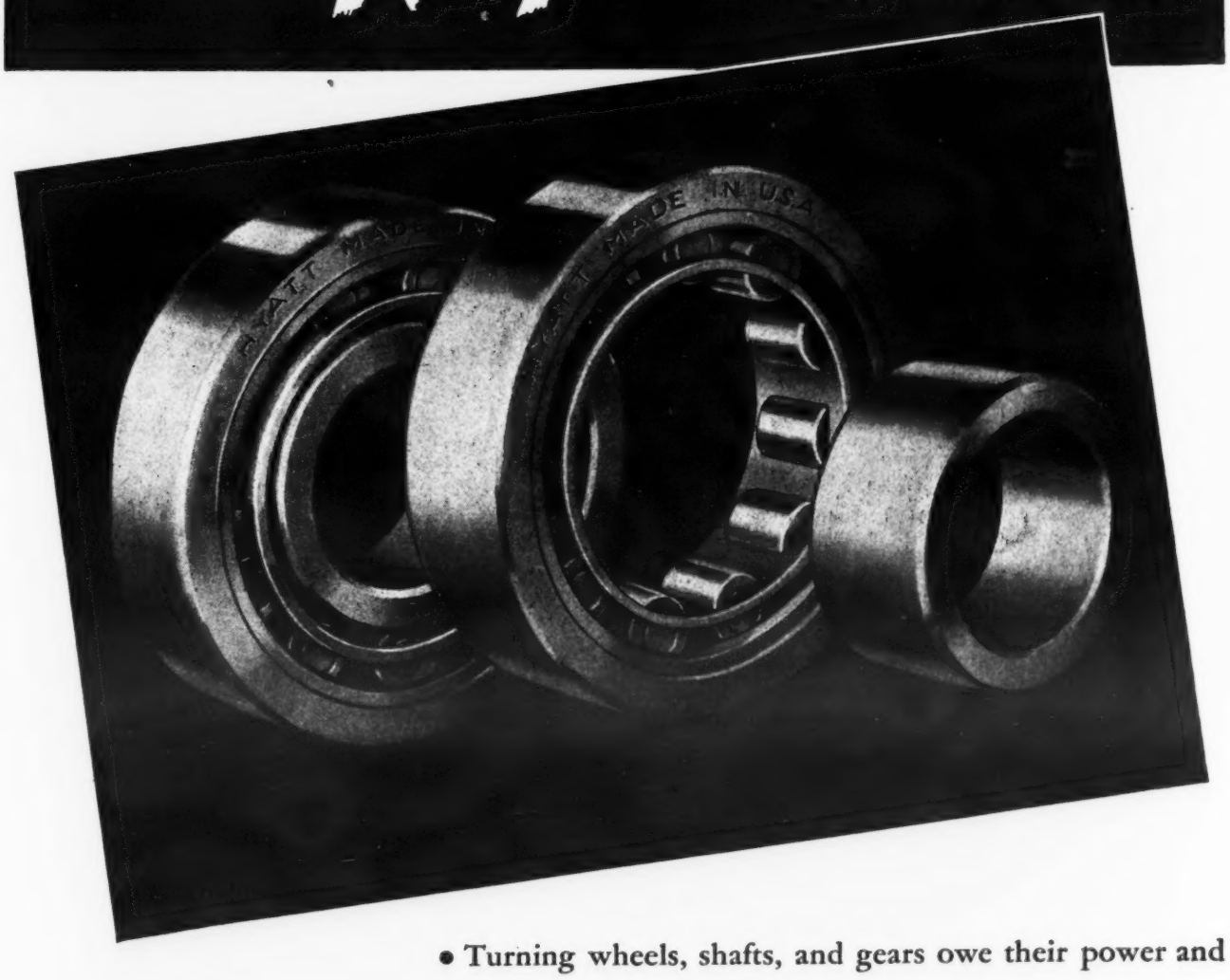
DAVIS & THOMPSON CO., 6619 W. Mitchell st., Milwaukee, Wis. Frank M. Davis, pres., gen. mgr., sales mgr.; John T. Thompson, vice-pres., treas.; A. P. Fritsch, secy., pur. agt.; Wm. H. Weimer, G. L. Otto, engr. Det. Rep.—Riordan Machinery Co., 213 Curtis bldg.

DAYTON PUMP & MFG. CO., 500 N. Webster st., Dayton, O. Gasoline dispensing pumps for service stations. F. M. Tait, pres.; E. E. Eickmeyer, vice-pres., gen. mgr.; R. L. Kauffman, secy.-treas.; F. B. Stilwell, asst. secy.; J. N. Riggs, asst. treas.; K. M. Brower, sales mgr.; H. Rothermel, adv. mgr.; A. G. Horvath, engr.; J. J. Havens, pur. agt. Adv. Agcy.—J. Horace Lytle Co., Dayton, O.

DAYTON RUBBER MFG. CO., Dayton, O. Fan belts, radiator hose, couplings, tires, cog belt drives. J. A. MacMillan, chmn.; A. L. Freedlander, pres., gen. mgr.; C. E. Hooven, vice-pres., secy.; I. Eisbrouch, vice-pres. and mgr. tire sales; K. H. Glanton, vice-pres. and mgr. mechanical sales; E. A. Baker, treas.; R. L. Wetzel, adv. mgr.; J. C. Cunningham, pur. agt. Det. Rep.—F. C. Murray, 329 Lexington bldg. Adv. Agcy. — Geyer, Cornell & Newell, Inc., Dayton, O.

(Continued on page 55)

THEY STAY *Right...* ON THE JOB!

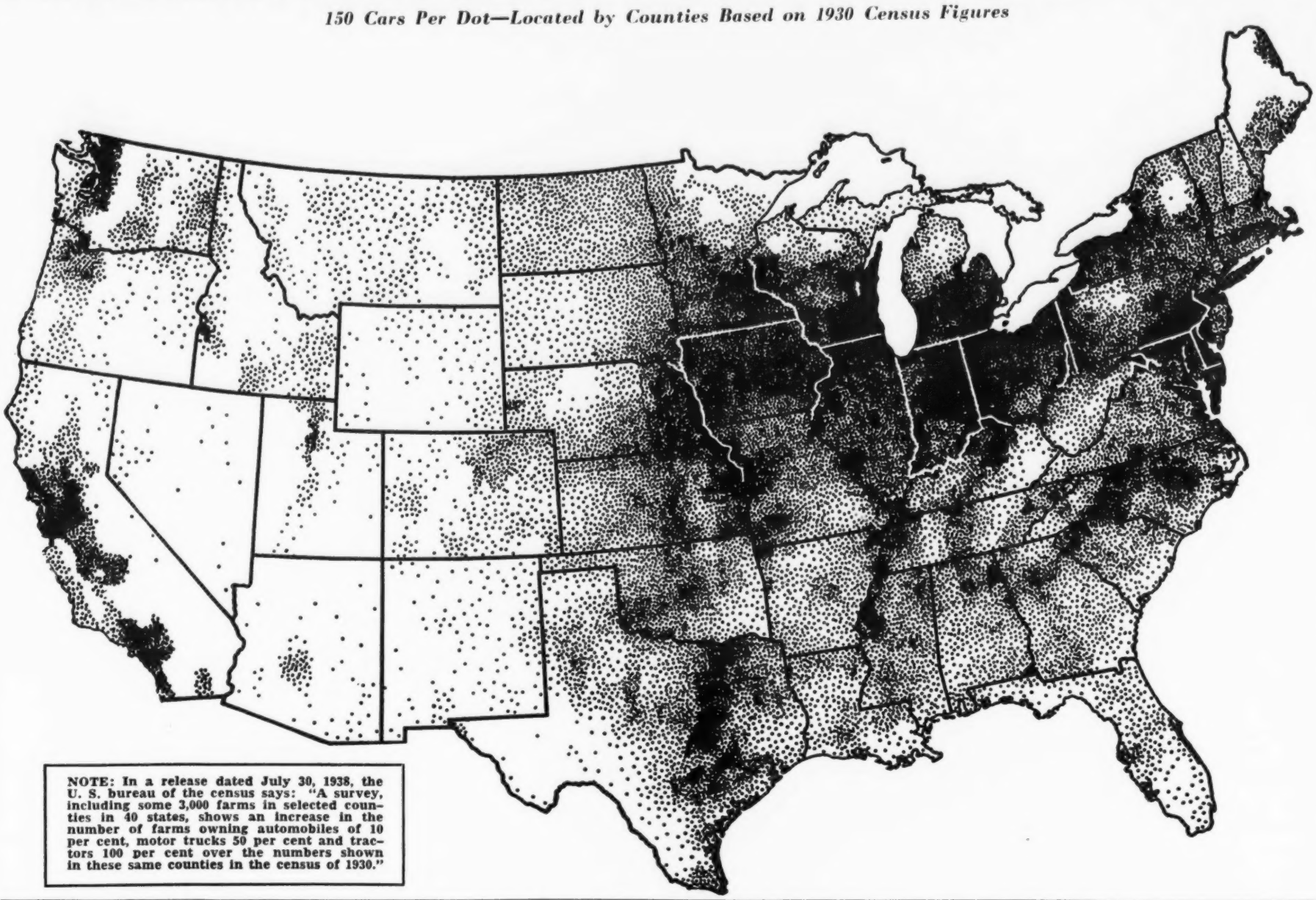


HYATT ROLLER BEARINGS

• Turning wheels, shafts, and gears owe their power and maintenance conservation to Hyatt Roller Bearing design, precision, and stamina. You have complete assurance that Hyatts will give longer life under heavy loads, keep related parts in alignment, resist wear, and transmit the full measure of power. Years of hard service in automotive equipment, under all kinds of conditions, do not lessen their original accuracy, strength, or performance. Stay *right* with Hyatts! Hyatt Bearings Division, General Motors Corporation, Harrison, New Jersey, and Detroit, Michigan.

Distribution of Motor Vehicles on Farms in U. S.

150 Cars Per Dot—Located by Counties Based on 1930 Census Figures



NOTE: In a release dated July 30, 1938, the U. S. bureau of the census says: "A survey, including some 3,000 farms in selected counties in 40 states, shows an increase in the number of farms owning automobiles of 10 per cent, motor trucks 50 per cent and tractors 100 per cent over the numbers shown in these same counties in the census of 1930."

Farm Income From Sales

Farm Income from Sales of 33 Leading Products and AAA Payments (Thousands of Dollars—000 Omitted) JANUARY-DECEMBER

State	1934	1935	1936	1937	Income Per Farm Dollars
Alabama	$107,097	$108,026	$103,898	$133,829	$489
Arizona	33,351	49,953	44,431	58,049	3,084
Arkansas	114,157	116,483	114,669	138,513	547
California	421,942	492,446	549,965	660,232	4,391
Colorado	85,141	105,911	123,358	145,974	2,294
Connecticut	35,701	40,439	42,555	49,419	1,537
Delaware	11,776	13,905	14,905	17,705	1,706
Florida	92,034	90,197	99,681	139,019	1,908
Georgia	123,403	123,397	135,976	154,127	615
Idaho	70,975	78,654	87,570	110,750	2,455
Illinois	312,700	378,146	453,059	522,001	2,257
Indiana	185,874	238,300	266,150	300,562	1,496
Iowa	420,126	494,122	561,430	522,356	2,353
Kansas	249,455	274,550	298,806	343,144	1,965
Kentucky	97,279	131,969	122,790	162,197	583
Louisiana	91,471	118,270	105,345	127,614	750
Maine	41,579	33,324	50,479	59,077	1,410
Maryland	51,850	60,544	65,971	76,692	1,727
Massachusetts	41,511	48,374	51,135	65,583	1,869
Michigan	147,958	172,105	193,567	246,198	1,253
Minnesota	225,953	277,627	345,052	358,907	1,765
Mississippi	127,345	130,348	157,075	168,036	539
Missouri	196,424	244,601	258,631	284,601	1,022
Montana	79,626	100,545	80,595	88,363	1,748
Nebraska	241,118	239,728	270,972	252,600	1,890
Nevada	7,628	10,383	10,765	13,214	3,575
New Hampshire	14,699	16,601	16,918	20,061	1,134
New Jersey	64,049	72,417	78,334	90,893	3,094
New Mexico	39,956	38,160	42,482	50,642	1,224
New York	220,520	234,082	272,442	313,649	1,772
North Carolina	226,542	215,330	200,960	271,132	901
North Dakota	99,157	93,093	94,297	118,296	1,398
Ohio	212,298	277,681	291,644	343,670	1,347
Oklahoma	140,017	167,998	145,269	189,321	888
Oregon	64,112	81,823	87,628	127,511	1,967
Pennsylvania	187,193	212,916	229,052	277,011	1,448
Rhode Island	6,192	7,270	8,069	9,114	2,106
South Carolina	94,891	96,257	91,296	103,172	623
South Dakota	78,718	92,910	103,972	102,908	1,233
Tennessee	96,093	107,930	108,419	137,104	501
Texas	426,241	417,845	430,637	544,176	1,085
Utah	28,701	35,707	39,767	47,411	1,545
Vermont	27,430	32,441	32,978	38,173	1,411
Virginia	88,847	100,927	103,208	123,774	626
Washington	115,323	138,794	135,722	168,340	1,995
West Virginia	28,420	34,036	34,343	41,133	393
Wisconsin	199,715	250,428	303,727	332,013	1,661
Wyoming	35,595	42,683	46,884	52,750	3,017
TOTAL	**$6,108,183**	**$6,939,676**	**$7,506,878**	**$8,701,016**	**$1,277**

Registrations of Motor Vehicles on Farms

Automobiles

	Number of Automobiles on Farms	Per Cent of Farmers Owning Cars	No. Cars to Every 100 Farms
Texas	300,176	56.7	60.5
Iowa	240,512	90.2	111.2
Ohio	201,552	78.5	91.8
Illinois	192,873	79.5	89.8
Minnesota	185,717	86.0	100.1
Wisconsin	176,764	83.9	97.1
Missouri	176,466	64.1	68.9
Kansas	171,018	87.5	103.0
Indiana	154,556	77.9	84.9
Pennsylvania	152,222	70.3	88.5
Michigan	150,922	78.9	88.8
New York	141,916	72.0	88.6
Nebraska	141,144	91.8	109.0
California	136,842	76.8	100.3
North Carolina	132,876	44.8	47.5
Oklahoma	127,448	57.7	62.4
Tennessee	89,032	34.2	36.2
Georgia	88,479	33.4	34.5
Virginia	88,463	47.1	51.7
Kentucky	86,784	33.3	35.1
Mississippi	85,563	26.7	27.4
South Dakota	81,923	86.5	98.5
North Dakota	78,798	86.6	100.9
Alabama	73,634	27.6	28.6
Arkansas	65,935	26.3	27.1
South Carolina	61,754	37.4	39.1
Washington	65,995	71.6	78.5
Colorado	52,258	76.0	86.3
Oregon	47,440	75.3	85.9
Louisiana	43,082	25.7	26.7
Montana	38,166	72.6	80.3
Maryland	37,972	70.6	87.9
West Virginia	36,978	40.5	44.7
Idaho	33,966	73.8	81.5
Florida	26,387	41.0	44.3
Maine	26,227	59.0	67.2
New Jersey	22,371	70.1	88.2
Vermont	18,620	63.6	74.8
Massachusetts	17,638	57.6	68.9
Utah	17,574	60.2	65.0
New Mexico	15,395	44.9	49.0
Connecticut	13,154	61.9	76.5
Wyoming	12,824	71.6	79.8
New Hampshire	11,079	62.3	74.3
Arizona	9,916	57.9	74.8
Delaware	8,724	77.2	89.9
Nevada	2,921	69.6	85.0
Rhode Island	2,569	61.9	77.3
Total, U. S.	4,134,625	58.0	65.7

Motor Trucks

	Number of Trucks on Farms	Per Cent of Farmers Owning Trucks	No. Trucks to Every 100 Farms
New York	58,974	33.8	36.8
Texas	52,580	10.1	10.6
Wisconsin	51,786	27.6	28.5
Pennsylvania	47,062	25.0	27.4
California	40,971	26.3	30.0
Illinois	40,371	18.1	18.8
Ohio	39,210	16.7	17.8
Michigan	36,768	20.6	21.6
Minnesota	36,577	19.2	19.7
Kansas	33,648	19.3	20.3
Iowa	32,669	14.8	15.1
Indiana	30,037	15.7	16.5
Nebraska	26,045	19.4	20.1
Oklahoma	23,930	11.3	11.7
Missouri	20,132	7.5	7.9
Virginia	19,459	10.5	11.4
Washington	18,836	24.9	26.4
North Carolina	18,558	6.3	6.6
North Dakota	16,990	21.2	21.8
Colorado	16,918	26.8	27.9
Mississippi	16,503	5.0	5.3
Georgia	15,967	5.9	6.2
South Dakota	14,816	17.4	17.8
New Jersey	14,753	49.3	58.1
Montana	14,615	29.0	30.7
Alabama	12,838	4.7	5.0
Florida	12,203	18.4	20.5
Maryland	11,365	23.6	26.1
Arkansas	11,000	4.3	4.5
Maine	10,781	25.3	27.6
Oregon	9,741	16.5	17.6
Massachusetts	9,572	31.2	37.4
Louisiana	9,281	5.4	5.7
Tennessee	9,039	3.5	3.7
West Virginia	7,432	8.4	9.0
Kentucky	7,188	2.7	2.9
South Carolina	6,966	4.2	4.4
Connecticut	6,344	31.5	36.9
Idaho	6,281	14.4	15.1
New Mexico	5,328	16.0	17.0
Vermont	5,035	18.6	20.2
New Hampshire	4,539	27.2	30.5
Utah	4,189	14.7	15.5
Wyoming	4,108	23.4	25.6
Arizona	3,062	19.2	23.1
Delaware	2,996	28.6	30.9
Rhode Island	1,701	41.1	51.2
Nevada	1,241	32.5	36.1
Total, U. S.	900,385	13.4	14.3

Who's Who

(Continued from Page 45)

DAYTON STEEL FDY. CO., 1366 Miami Chapel rd., Dayton, O. Cast steel wheels, cast superheated alloy brake drums, fifth wheels, all of these for commercial motor vehicles. Miscellaneous steel castings. George Walther, pres.; Jacob Walther, vice-pres.; S. A. Macy, secy.-treas.; E. L. Miller, engr.; J. A. Graham, pur. agt.

DAYTON WHEEL CO., W. of 237 S. Kilmer st., Dayton, O. Replacement wire wheels, racing wheels, trailer axles and chassis. A. N. Wilcox, pres., gen. mgr.; H. L. Rogge, vice-pres.; J. F. Dobbins, secy.; C. L. Miller, treas.

D & B MFG. CO., 2333 S. Michigan ave., Chicago, Ill. Gears, chains, couplings. J. H. Balch, pres.; Samuel Green, vice-pres.; C. L. Peterson, secy.; J. H. Balch, treas.; A. H. Babin, sales mgr.; Paul Jachim, engr.; Ed Staske, pur. agt.

DEAN & SHERK CO., Inc., Lincoln st., Lawrenceburg, Ky. Industrial cotton threads. Thomas Sherk, pres.; G. W. Krentler, vice-pres.; H. D. McBrayer, secy.; G. W. Krentler, treas.; E. M. Hodgson jr., sales mgr. **Det. Rep.**—Thomas Sherk, 2832 E. Grand blvd.

DEFIANCE PRESSED STEEL CO., Cheney and Otis st., Marion, O. Automobile hot water heaters, steering wheel inserts, spring covers, general stampings. E. L. Herbolsheimer, pres., sales mgr.; H. F. Hadley, vice-pres.; O. P. Bereit, secy.-treas., gen. mgr.; V. H. Cope, engr.; H. Smith, pur. agt.

DEFIANCE SPARK PLUG CORP., 323 20th st., Toledo, O. Spark plugs, spark plug testers. Raymond P. Lipe, pres., treas., gen. mgr.; Robert Newbegin, secy.; P. M. Pontius, sales mgr.; R. J. L. Dutterer, engr.; Irwin A. Schwyn, asst. treas.

DELANY & CO., Inc., Milnor and Cottman sts, Tacony, Philadelphia, Pa. Glue and curled hair. Howard S. Delany, pres., treas.; William D. Whitaker, vice-pres., secy.; Lewis T. Kaelin, asst. treas.; Walter M. Shreve, engr.; Wesley Howard, pur. agt.

DELCO APPLIANCE DIV., General Motors Corp., 391 Lyell ave., Rochester, N. Y. Automatic heating equipment, car radio vibrators, automotive electrical equipment and accessories. E. A. Halbleib, gen. mgr.; C. W. Coapman and D. M. Gardiner, sales mgrs.; D. M. Gardiner, adv. mgr.; W. H. Hutchins, engr.; C. E. Spieler, pur. agt.; T. L. Lee, works mgr.; G. M. Rinker, comptr. **Det. Rep.**—H. H. Leonard, Delco Appliance Div., 13-101 General Motors bldg. **Adv. Agcy.**—Stewart, Hanford & Frohman, Inc., 11 James st., Rochester, N. Y.

DELCO BRAKE DIVISION, 1420 Wisconsin blvd., Dayton, O. Hydraulic brakes, Delco brake fluid, hydraulic brake controls, Delco brake hose. F. H. Irelan, gen. mgr.; R. O. Yost, sales mgr., adv. mgr., serv. mgr.; O. Rasmussen, engr.; J. H. Weyer, pur. agt.; A. L. Ward, fcty. mgr.; D. R. Matthewson, comptr.; J. H. Klein jr., dir. of inspection. **Adv. Agcy.**—Campbell-Ewald Co., General Motors bldg., Detroit, Mich.

DELCO PRODUCTS DIV., General Motors Corp., 329 E. First st., Dayton, O. Shock absorbers, electric motors. C. H. Kindl, pres., gen. mgr.; W. C. Reese, treas.; R. L. Wilkinson, sales mgr.; J. N. Tilbrook, adv. mgr.; P. H. Rutherford, engr.; F. J. O'Donnell, pur. agt. **Det. Rep.**—C. V. Williams, Delco Products Div., 13-270 General Motors bldg. **Adv. Agcy.**—Campbell-Ewald Co., General Motors bldg., Detroit, Mich.

DELCO RADIO DIV., General Motors Corp., Kokomo, Ind. Auto radios, carburetors. Ray C. Ellis, gen. mgr.; C. E. Greene, sales mgr.; B. A. Schwarz, engr.; E. S. Needler, pur. agt.

DELCO-REMY DIV., General Motors Corp., Anderson, Ind. Automotive electrical equipment: generators, voltage regulators, starting motors, ignition distributors and coils, Delco storage batteries, Klaxon horns, starting, lighting, ignition and foot-dimmer switches, automotive locks and automatic carburetor controls. F. C. Kroeger, gen. mgr.; A. G. Phelps, sales mgr.; Foust Childers, adv. mgr.; R. M. Critchfield, chief engr.; H. E. Nye, pur. agt.; B. W. Cooper, comptr.; O. V. Badgley, fcty. mgr. **Det. Rep.**—Delco-Remy Div., General Motors bldg. **Adv. Agcy.**—Campbell-Ewald Co., General Motors bldg., Detroit, Mich.

DELPHI BODY WORKS, 313 S. Washington st., Delphi, Ind. All-steel school bus bodies, public utility service bodies, all-steel and composite custom built commercial bodies. W. H. Bradshaw, C. R. Bradshaw and R. G. Bradshaw, partners.

DELTA ELECTRIC CO., 33rd and Nebraska sts., Marion, Ind. Electric lighting devices and automotive parts. W. B. Stephenson, chmn., pres., gen. mgr.; D. D. Wellman, vice-pres., treas., adv. mgr.; J. W. Wharton, vice-pres.; L. F. Cole, secy., sales mgr., pur. agt.; L. B. Richardson, asst. secy.; H. D. Starr, asst. treas.; W. C. Crimmins, engr. **Det. Rep.**—Geo. A. Maher, 2-244 General Motors bldg. **Adv. Agcy.**—Lamport, Fox & Co., South Bend, Ind.

DELTA OIL PRODUCTS CO., Station F, P. O. Box 235, Milwaukee, Wis. Delta triple film motor oils, automotive and industrial greases, cutting oils, core washes, anti-rust compounds, soaps, etc. J. A. Gitzen, pres., sales mgr.; H. H. Kloehn, vice-pres., pur. agt.; H. A. Schmid, secy.-treas., gen. mgr. **Det. Rep.**—H. D. Farris, 10247 Prairie ave.

DE SOTO MOTOR CORP., Div. of Chrysler Corp., 6000 Wyoming ave., Detroit, Mich. Passenger cars. W. P. Chrysler, chmn.; Byron C. Foy, pres.; C. E. Bleicher, vice-pres., gen. mgr.; L. G. Peed, K. T. Keller, B. E. Hutchinson, F. M. Zeder, Lester L. Colbert, vice-pres.; H. A. Davies, treas.; R. P. Fohey, secy.; J. H. Wagstaff, gen. sales mgr.; R. M. Rowland, asst. gen. sales mgr.; Karl A. Bronson, adv. and sales prom. mgr.; J. L. Ballard, dir. of distr.; H. H. Dowdy, dir. of serv.; George Rumford, operating mgr.; L. Irving Woolson, chief engr. **Adv. Agcy.**—J. Stirling Getchell, Inc., 405 Lexington ave., New York, N. Y.

DETROIT AIR COMPRESSOR CO., 89 E. Baltimore ave., Detroit, Mich. Remanufacturing of air compressors, all sizes, more especially the large industrial sizes. David M. Davis, pres., treas.; Effie Davis, vice-pres.; Dorothy Davis, secy.

DETROIT ALUMINUM AND BRASS CORP., 3975 Christopher ave., Detroit, Mich. Bronze-back, babbit-lined bearings, steel-back, babbitt-lined bearings; steel back, cadmium-nickel-lined bearings; solid bronze bushings and brass-machined parts; brass castings (rough). Samuel Frank, chmn.; L. G. Hooker, pres., gen. mgr., sales mgr.; P. J. Fobert, vice-pres.; Jerome J. Frank, secy., pur. agt.; Harry Frank, treas.; W. M. Cooper, engr.

DETROIT BRONZE BUSHING CO., 1061 Beaufait ave., Detroit, Mich. Bronze bushings, seals rings (for refrigerators), brass machine parts. Donald C. Stevenson, pres., gen. mgr. **Det. Rep.**—Detroit Br. Bshg Co., 1061 Beaufait, (factory).

DETROIT & CLEVELAND NAVIGATION CO., Detroit. James T. McMillan, pres.; T. J. McCarthy, Detroit, mgr.; W. J. Hoffman, Detroit, gen. agt.; J. P. Ranahan, Buffalo, gen. agt.; R. M. Burnham, Cleveland, gen. agt.; F. M. Wilson, Philadelphia, gen. agt.

DETROIT COVER CO., 3420 W. Fort st., Detroit, Mich. Seat covers, radiator grille covers, sun visors, tool and jack bags, fabric tire covers, automobile radiator insect screens, reupholstery covers for automobile seats, automobile emulsion for painting interior of automobile. T. J. McCormick, pres., gen. mgr., sales mgr., adv. mgr.; E. H. Oppatt, vice-pres.; L. M. McCormick, secy.-treas.; R. Crocker, engr.; E. H. Oppatt, pur. agt. **Det. Rep.**—A. O. Duchemin, 3420 W. Fort st.

DETROIT GASKET & MFG. CO., 12640 Burt rd., Detroit, Mich. Gaskets, channel runs, neoprene and thoikol compositions, cork and rubber, steelbestos, sound damping materials. L. H. Diehl, pres., gen. mgr.; W. E. Ritter, vice-pres.; E. W. Diehl, secy.-treas.; H. F. Doolittle, fcty. mgr.; Boyd S. Brown, sales mgr., adv. mgr.; George Balfe, engr.; Chas. Strauss, pur. agt. **Det. Rep.**—Boyd S. Brown, 14334 Archdale. **Adv. Agcy.**—Drum Agency, Fox Theatre bldg., Detroit, Mich.

DETROIT GEAR & MACHINE DIV., Borg-Warner Corp., 670 E. Woodbridge st., Detroit, Mich. Automotive transmissions and gears. Howard E. Blood, pres.; C. D. Donaven, vice-pres., gen. mgr.; H. H. Whittingham, J. H. Knapp, vice-pres.; J. Park, secy.-treas.; P. B. Zimmerman, sales mgr.; J. A. Sterling, adv. mgr.; D. T. Sicklesteel, engr.; W. H. McKiggan, pur. agt.; E. C. Graham, prod. mgr.

DETROIT GRAY IRON FDY. CO., 6403 Wight st., Detroit, Mich. Gray iron and semi-steel castings. Howard Colby, chmn., secy.-treas.; Hugh Martin, pres.; Charles Erdman, vice-pres.; E. A. Kreller, gen. mgr.; Ted Hill, sales mgr., adv. mgr.; Sydney T. Wyatt, pur. agt.; Walter Montgomery, ofs. mgr. **Det. Rep.**—Ted Hill, 6403 Wight st. **Adv. Agcy.**—Brown & Bigelow, St. Paul, Minn.

(See display advertising index)

DETROIT HARVESTER CO., 5450 W. Jefferson ave., Detroit, Mich. Dura Div. 4500 Detroit ave., Toledo, O. Automobile window regulators and hardware. Channels, stampings, die castings, electro platers, hinges. Power take-offs, street sweepers, mowers. H. L. Pierson, pres., treas.; C. G. Selden, vice-pres.; Wm. F. Hardin, secy., pur. agt.; J. T. Gallatin, Dura Div., sales mgr.; J. R. Donahue, adv. mgr.; Bert Floraday, Dura Div., engr.

DETROIT INSURANCE AGENCY, 502 Fisher bldg., Detroit, Mich. All forms of insurance. George W. Carter, pres.; Henry L. Newman, vice-pres.; Louis J. Lepper, secy.-treas.

DETROIT NUT CO., Inc., Hubbard ave. and M. C. R. R., Detroit, Mich. Milled from bar nuts (steel, brass and bronze). E. J. Quinn, pres.; Roy E. Wing, vice-pres.; C. J. Eberhardt, secy.-treas.; H. M. de Vries, sales mgr.; A. Patch, engr.; R. E. Hinchberger, pur. agt.

DETROIT PLATING INDUSTRIES, 1033-43 Mt. Elliott ave., Detroit, Mich. Patented two-piece "Acorn" or capped nut. For 22 years have been in the electroplating business. We do cadmium-copper-nickel-chromium and zinc and rust-proofing of metals. R. E. Bavs, pres.; H. A. Molt, vice-pres., sales mgr., adv. mgr.; C. S. Slack, secy.-treas., gen. mgr.; D. H. Henning, engr.; C. S. Slack, pur. agt. **Det. Rep.**—E. Slack, 1033-43 Mt. Elliott ave., Detroit.

DETROIT REX PRODUCTS CO., 13005 Hillview ave., Detroit, Mich. Detrex degreasing machines, Perm-A-Clor and Triad safety solvents, Triad alkali cleaners and strippers. Robert A. Emmett, pres.; W. W. Davidson, vice-pres. in chge. of sales; C. F. Dinley, vice-pres. in chge. of res.; G. E. Powers, secy.-treas.; G. W. Walter, adv. mgr.; W. I. Tebo, chief engr.; W. G. Smith, pur. agt.

DETROIT STEEL PRODUCTS CO., 2250 E. Grand blvd., Detroit, Mich. "Detroit" (leaf) springs, "Fenestra" steel windows and doors, "Holorib" steel roof deck and floor forms. John G. Rumney, chmn.; Victor F. Dewey, pres., gen. mgr.; Mason P. Rumney, Harold F. Wardwell, W. C. Owen, vice-pres.; Edgar R. Ailes, secy.-treas.; Harold F. Wardwell, sales mgr.; W. T. Huddle, adv. mgr.; Samuel P. Hess, engr.; T. J. Donnelly, pur. agt. **Det. Rep.**—Detroit Steel Prod. Co., 2250 E. Grand blvd. **Adv. Agcy.**—Fuller & Smith & Ross, Inc., Cleveland, O.

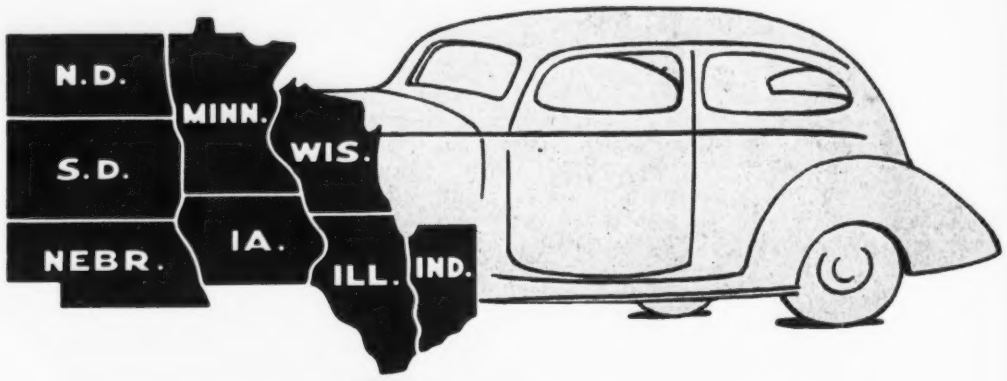
DETROIT TOOL & MFG. CO., 1660 Beard ave., Detroit, Mich. Open end wrenches, pneumatic chisels, punches, screw drivers, foundry tools, track tools, sockets, ratchet wrenches, socket wrenches, offset handles, speed wrenches, brace handles, production stampings, dies and fixtures. Louis G. Palmer, pres.; H. W. Peltier, vice-pres.; H. D. Kilets, secy.-treas.; Fred Glaser, engr.; E. J. Mahar, pur. agt.

DETROIT TRAILER EQUIPMENT CO., 481 Beaufait st., Detroit, Mich. Factory farm and highway trailers, steel and wood bodies, pressed steel parts, steel shapes. G. A. Kendall, gen. mgr.; G. F. Strong, engr.

DE VILBISS CO., 300 Phillips ave., Toledo, O. Spray-painting equipment, exhaust systems, air compressors, oil guns, hose and hose connections. A. D. Gutchess, pres.; W. F. Gradolph, vice-pres. in chge. of sales; W. W. Conklin, secy.-treas.; F. A. Bailey, vice-pres., gen. mgr.; R. A. Guyer, sales mgr.; B. C. Gardner, sales prom.; H. C. Lambert, chief engr.; R. W. Witchner, pur. agt. **Det. Rep.**—H. C. Cunningham, 2865 E. Grand blvd. **Adv. Agcy.**—Meldrum & Fewsmith, Inc., 2325 Madison ave., Toledo, O.

DIAMOND CHAIN & MFG. CO., 402 Kentucky ave., Indianapolis, Ind. Finished steel roller chains, stainless steel and bronze chain machine steel and cast-iron sprockets, motor drives, double chain type flexible shaft couplings, conveyor chains. G. A. Wainwright, pres., gen. mgr.; C. C. Winegardner, vice-

(Continued on Page 59)



These 8 States Buy 1/3 of all the cars purchased by Farmers

Facts and figures substantiate your judgment in choosing . . .

MIDWEST FARM PAPERS

to cover this great car-buying market. Because they give you . . .

1. TWICE THE COVERAGE

Actual farm-to-farm studies by agencies and advertisers on 218 rural routes show that The Midwest Farm Papers give 77% ACTUAL FARM COVERAGE of these states—compared to only 36% coverage by the strongest national farm paper.

2. TWICE THE READER PREFERENCE

A subscription to a Midwest Farm Paper costs almost TWICE as much as for any National farm paper. Yet TWICE as many midwest farmers subscribe to Midwest Farm Papers as to any National.

3. THREE-TO-ONE DEALER PREFERENCE

Distributors made independent surveys of 9,464 midwestern dealers. More than 75% of all AUTOMOBILE DEALERS expressed preference for advertising in The Midwest Farm Papers. Only one in four voted for one or another of the Nationals.

Ask the farmer—ask your dealer. Both say: "It's The Midwest Farm Papers" if you really want to sell cars in the Midwest farm market."

CHICAGO
6 No. Michigan Ave.

NEW YORK
250 Park Avenue

DETROIT
542 New Center Bldg.

SAN FRANCISCO
1548 Russ Building

Network Expenditure of Individual Passenger Car Advertisers, '34-'38

All Network Figures from NBC, CBS and National Advertising Records

Advertiser	Total 1934	Total 1935	Total 1936	Total 1937	1st Half 1938
Buick	$ 73,984	$ 18,016	$ 22,866	$ 46,825	.....
Cadillac	65,000	.....	32,388	14,952	.....
Chevrolet	342,028	344,691	228,759	375,425	.....
Chrysler	18,872	.....	358,857	911,051	$ 514,240
Dodge	.....	5,038	5,291	.....	.....
Fisher Body	7,162	3,435	2,928	51,135	.....
Ford	1,191,577	1,877,850	2,010,539	1,768,285	761,482
General Motors	67,584	325,934	625,500	446,026	.....
Hudson	268,452	166,460	.....	147,690	139,735
Lincoln	.....	23,750	72,125	.....	.....
Nash	16,184	16,184	89,790	334,233	258,439
Olds	120,224	.....	95,907	142,451	.....
Packard	94,556	194,871	372,099	757,820	146,220
Plymouth	.....	.....	253,430	.....	.....
Pontiac	235,244	108,660	98,700	741,477	130,615
Studebaker	248,818	425,124	354,564	130,692	.....
Willys	.....	.....	.....	21,645	.....
TOTAL	$2,749,685	$3,510,013	$4,623,743	$5,889,707	$1,950,731

These figures represent expenditures for facilities only. They do not include talent costs.

Expenditure of Automotive Industry on Radio Networks, 1927-1937

Year	Expenditure	Pct. Change Over Previous Year	No. of Adv.	Expenditure Per Advertiser	Rank in Use* Network Time
1927	$ 433,063	....	11	$ 39,360	4
1928	1,249,000	+189.4%	16	78,062	3
1929	1,720,803	+ 37.8	15	114,720	4
1930	1,355,414	— 21.2	12	112,951	8
1931	1,313,923	— 3.1	19	69,153	9
1932	2,010,251	+ 53.0	19	105,802	5
1933	2,318,309	+ 15.3	17	136,371	5
1934	3,772,486	+ 62.7	20	188,628	3
1935	4,227,046	+ 12.0	15	281,803	3
1936	5,439,502	+ 33.1	20	281,341	3
1937	6,883,685	+ 22.3	17	404,492	3

*Figures within this column indicate the position the automotive industry holds among other industries in use of network advertising, as measured by total expediture for time.

These figures represent expenditure facilities only. They do not include talent costs.

Network Expenditures of Individual Passenger Car Advertisers---1937

	CBS	RED	BLUE	MBS
Chrysler	$ 911,051	$	$	$
Ford Motor	1,649,309		118,976	
GM-Institutional		192,895	253,131	
GM-Buick		32,829	13,996	
GM-Chevrolet	375,425			
GM-Fisher Body	51,135			
GM-Cadillac		14,952		
GM-Oldsmobile		142,451		
GM-Pontiac	437,900	164,017	139,560	
Hudson Motor	147,690			
Nash-Kelvinator	334,233			
Packard Motor		757,820		
Studebaker		65,952	64,740	
Willys-Overland				21,645
TOTAL	$3,906,743	$1,370,916	$ 590,403	$ 21,645

Percentage of Total Automotive Network Advertising Devoted to Passenger Cars, Accessories and Tires—1927-1938

Year	Total Expenditure	Pct. Devoted to Passenger Cars	Pct. Devoted to Accessories	Pct. Devoted to Tires
1927	$ 433,063	30.8%	11.3%	57.9%
1928	1,249,000	42.2	6.2	51.6
1929	1,720,803	44.0	20.0	36.0
1930	1,355,414	48.2	12.4	39.4
1931	1,313,923	51.7	18.0	30.2
1932	2,010,251	53.4	8.2	38.4
1933	2,318,309	80.4	4.6	15.0
1934	3,772,486	73.9	7.5	18.6
1935	4,227,046	81.9	1.6	16.5
1936	5,439,502	82.2	6.3	11.5
1937	6,883,685	85.6	6.6	7.8
1st Half 1938	2,953,938	66.0	13.9	20.1

These figures represent expenditures for facilities only. They do not include talent costs.

Annual Expenditure of Automotive Industry by Passenger Car, Tires and Accessories Groups

Year	Total Expenditure	Passenger Cars	Accessories	Tires
1927	$ 433,063	$ 133,506	$ 48,960	$250,597
1928	1,249,000	527,146	77,439	644,415
1929	1,720,803	757,214	344,221	619,368
1930	1,354,414	653,994	167,941	533,479
1931	1,313,923	679,914	237,025	396,984
1932	1,939,094	1,072,899	93,790	772,790
1933	2,318,309	1,863,436	107,389	347,484
1934	3,772,486	2,785,685	284,395	702,406
1935	4,227,046	3,463,813	66,432	696,801
1936	5,439,502	4,623,743	168,505	647,254
1937	6,883,685	5,889,707	456,344	537,634
1st Half 1938	2,953,938	1,950,731	409,438	593,769

These figures represent expenditures for facilities only. They do not include talent costs.

Chain Programs Sponsored by Automobile Manufacturers

(Numerals After Chain Indicate Number of Stations)

Automobiles

CONTINENTAL AUTOMOBILE CO.

Aug., 1933-Oct., 1933—NBC Blue (22) — "March of Transportation." Dramatized incidents in history of transportation.

DURANT MOTORS, Inc.

Oct., 1929-Apr., 1930—NBC Red (38)—"Heroes of the World." Dramatizations with music.

CHRYSLER CORP.

(Plymouth)

Nov., 1932—CBS (32) — Business conference. Music, comedy, drama.

Apr., 1933—CBS (50)—Pace Setters of 1933.

Oct., 1933-Dec., 1933—CBS (68)—Elmer Everett Yess. Drama.

May, 1934—CBS (88)—One broadcast. Chrysler choir.

Feb., 1936-May, 1936—CBS (87)—Ed Wynn in Gulliver's Travels, Male Quartet, Female Vocal Ensemble and John S. Young.

May, 1936-Aug., 1936—NBC Red (60)—Ed Wynn, Graham McNamee, Lennie Hayton's orchestra.

(Chrysler)

Apr., 1932-June, 1932—CBS (67)—Ziegfield Radio show.

Jan., 1934—CBS (57)—One broadcast. Automobile show.

Mar., 1936-June, 1936—CBS (63)—"Chrysler Airshow," Alexander Gray, baritone, Mark Warnow, Charles Hanson Towne, chorus.

Sept., 1936—still on—CBS (91)—"Major Bowes Amateur Hour."

(Dodge)

Sept., 1927-Dec., 1927—CBS (16)—

July, 1935 — CBS (77) — Dodge Economy Day, Ted Husing, Victor Moore, Arnold Johnson Orchestra. Mr. VanderZee, general sales manager.

Apr., 1936—CBS (80)—Dodge presents Bert Lahr, Gertrude Niesen, Ted Husing and Freddie Rich's Orchestra.

FORD MOTOR CO.

Jan., 1927—NBC Red (22)—"The Old-Fashioned Barn Dance."

July, 1933-Dec., 1933—NBC Red (23)—"Lum & Abner."

Feb., 1934-Dec., 1934—CBS (83)—Fred Waring's Pennsylvanians and Guest Stars.

Aug., 1934-Oct., 1934—CBS (22)—Mickey Cochrane on Pennant Race, Talk of Baseball.

Oct., 1934—NBC Red and Blue (79)—"World Series Baseball."

Oct., 1934-June, 1936—CBS (87)—Ford Sunday Symphony Concert and Guest Stars.

Oct., 1934—CBS (Complete Network)—World Series, Ted Husing and Pat Flanagan.

July, 1935-Dec., 1935—CBS (87)—Fred Waring and His Pennsylvanians.

Oct., 1935—CBS (Complete Network)—World Series, 6 games.

Oct., 1935—NBC Red and Blue (81)—"World Series Baseball."

Dec., 1935-Dec. 1936—CBS (87)—Fred Waring and His Pennsylvanians.

Jan., 1936-Dec., 1936—NBC Blue (59)—"Fred Waring's Orchestra."

Sept., 1936—NBC Red (59), CBS (94)—"World Series."

Jan., 1937 — June, 1938 — CBS (89)—"Al Pearce and Gang."

Jan., 1937-Apr. 1937—NBC Blue (53)—"Universal Rhythm" with Rex Chandler.

Sept. 1937 — June, 1938 — CBS (96)—"Ford Sunday Evening Hour."

Lincoln

Dec., 1935-Dec., 1936—CBS (87)—Jose Mazares and His South Americans.

FRANKLIN MOTOR CAR CO.

July, 1928—NBC Red (38)—Joseph Pasternack and Franklin Salon orchestra.

GENERAL MOTORS CORP.

(Institutional)

Nov., 1927-Oct. 1931 — NBC Red (40)—"General Motors Family Party."

Oct., 1931-Oct., 1932—NBC Red (40)—"Parade of States."

Oct., 1934-Apr., 1935—NBC Blue (17)—"Symphony Concerts" with Erno Rapee.

Oct., 1935-June, 1936—NBC Red (64)—"Symphony Concerts" with Erno Rapee.

(Buick-Olds-Pontiac Sales Corp.)

July, 1932-Sept., 1932—NBC Red (35) — "Paul Whiteman's Orchestra and Artists."

Nov., 1932-Dec., 1932—NBC Red (50) — "Paul Whiteman's Orchestra."

Sept., 1936-Mar., 1937—NBC Red (64)—"Symphony Concerts."

Apr., 1937-June, 1938 — NBC Blue (44) — General Motors Concerts.

Oct., 1937-Dec., 1397 — NBC Blue (55) — General Motors Concerts.

(Buick)

July, 1927—NBC Red and Blue (39)—"Arthur Pryor's Band."

Nov., 1931-May, 1932—NBC Red (50)—"Frank Black's Orchestra, Revelers, Countess Olga Albani."

Oct., 1932-Mar., 1933—NBC Red (40) — "Paul Whiteman's Orchestra, Virginia Rea and Paul Oliver."

July, 1933-Sept., 1933—NBC Red (50)—"Gus Haenschen's Orchestra, Ohman & Arden, Conrad Thibault, Arlene Jackson."

Dec., 1933-Feb., 1934—CBS (55)—Robert Benchley, Andre Kostelanetz.

Sept., 1935—NBC Red and Blue (84)—"Fight — Baer and Louis."

June, 1936—NBC—Fight—Schmeling-Louis.

June, 1937—NBC Red and Blue (118)—Louis-Braddock fight.

August, 1937 — NBC Red and

(Continued on Next Page)

State Sales Tax Chart

(Prepared by Motor & Equipment Manufacturers Assn.)

ALABAMA	2% gross receipts; ½% on sales of motor vehicles.
ARIZONA	2% retail gross receipts.
ARKANSAS	2% retail gross receipts.
COLORADO	2% retail gross receipts.
CALIFORNIA	3% retail gross receipts.
CONNECTICUT	None.
DELAWARE	None.
GEORGIA	None.
FLORIDA	Chain store sales tax: ½% on gross receipts each store.
IDAHO	None.
ILLINOIS	2% retail gross receipts.
INDIANA	1% gross receipts, consumers sales.
IOWA	2% retail gross receipts.
KANSAS	2% gross receipts.
KENTUCKY	Tax repealed Jan. 15, 1936.
LOUISIANA	1% gross receipts.
MAINE	None.
MARYLAND	None.
MASSACHUSETTS	None.
MICHIGAN	Gross receipts 3% tangible personal property.
MINNESOTA	Chain gross sales and store receipts, 100,000, 1/20% by brackets to 1% over 1,000,000.
MISSISSIPPI	2% gross sales receipts.
MISSOURI	2% gross sales receipts of tangible personal property.
MONTANA	None.
NEBRASKA	None.
NEVADA	None.
NEW HAMPSHIRE	None.
NEW JERSEY	Repealed.
NEW MEXICO	2% gross sales receipts.
NEW YORK	New York City has 2% sales tax.
NORTH CAROLINA	3% gross sales receipts (merchants).
NORTH DAKOTA	2% gross sales receipts.
OHIO	3% gross sales receipts (bracketed).
OKLAHOMA	2% retail gross sales receipts.
OREGON	None.
PENNSYLVANIA	2% on each $1 gross sales preceding calendar year; law passed Aug. 1936 places tax of 10% of net price of liquor sold by state stores, which is to be paid by purchaser.
RHODE ISLAND	None.
SOUTH CAROLINA	None.
SOUTH DAKOTA	3% retail gross receipts.
TENNESSEE	None.
TEXAS	None.
UTAH	2% gross receipts.
VERMONT	None.
VIRGINIA	License tax based on gross receipts: 1,000, $10; 1,000 to 2,000, $20; over 2,000 $20 plus 13¢ on every $100 of sales.
WASHINGTON	Gross proceeds of sales 2%; retailers 2% plus ¼%.
WEST VIRGINIA	Gross receipts of sales 2% plus ½% on retail sales.
WISCONSIN	None.
WYOMING	2% on retail sales.

Capital Invested in Automobile Manufacturing*

(Automobile Manufacturers' Assn.)

Year	Cars	Trucks	Total
1919	$ 784,660,761	$230,782,577	$1,015,443,338
1920	870,953,600	306,425,000	1,204,378,000
1921	1,134,166,000	289,334,000	1,423,500,000
1922	1,154,103,335	302,546,620	1,456,649,954
1923	1,281,364,300	290,358,100	1,571,722,400
1924	1,373,372,426	317,677,686	1,691,050,112
1925	1,503,290,062	384,738,748	1,888,028,810
1926	1,646,589,759	442,908,566	2,089,498,325
1927	1,643,989,116	436,668,548	2,080,657,664
1928	1,578,021,207	387,289,301	1,965,310,508
1929	1,518,714,814	437,972,847	1,956,687,661
1930	1,442,275,653	438,532,580	1,880,808,233
1931	1,215,200,000	380,600,000	1,595,800,000
1932	1,118,600,000	371,300,000	1,489,900,000
1933	1,012,548,000	336,418,000	1,348,966,000
1934	955,599,000	322,918,000	1,278,517,000
1935	969,265,000	304,469,000	1,273,734,000
1936	1,004,766,000	338,435,000	1,343,201,000
1937	1,003,869,000	365,762,000	1,369,631,000

*The above figures represent net tangible assets of motor vehicle manufacturing plants located in United States, and do not include parts, accessory, body and tire manufacturers.

Chain Programs Sponsored by Automobile Manufacturers

(Continued from Previous Page)

Blue (90)—Louis-Farr Fight.
June, 1938—NBC Red and Blue (125)—Louis-Schmeling Fight.

(Cadillac)

Mar., 1927-June, 1927—NBC Red (25)—"Rosario Bourdon's Orchestra."
Sept., 1927—NBC Red (29)—"Cad-LaS Concert Orchestra."
Dec., 1933-Apr., 1934—NBC Blue (16)—"Shilkret's Orchestra and guest conductor, guest soloist."
Nov., 1936-Jan., 1937—NBC Red (47)—"LaSalle Fashion Show."

(Chevrolet)

Dec., 1928—CBS (20)—Three special announcements.
Aug., 1929—CBS (46)—One broadcast, Harry Klingler, Ted Husing, Jack Donahue.
Feb., 1932-July, 1932—NBC Red (54)—"Frank Black's Orchestra, Revelers, Ohman & Arden, etc."
Nov., 1932-June, 1933—NBC Red (56)—"Lew Silver's Orchestra and Al Jolson."
Oct., 1933-July, 1934—NBC Red (54)—"Al Jolson and Frank Black's Orchestra." After Mar. 3, 1934, "Jack Benny and Frank Black's Orchestra"; after Apr. 8, 1934, "Victor Wing's Orchestra."
Oct., 1934-Apr., 1935—CBS (87)—Isham Jones and Orchestra and Guest Stars.
July, 1935-Dec., 1935—NBC Red (61)—"G-Men with Phillips Lord."
Jan., 1936-Apr., 1936—NBC Red (58)—"Rubinoff's Orchestra" with Virginia Rea and Jan Peerce.
Oct., 1936—July, 1937—CBS (88)—Rubinoff's Orchestra.
Sept., 1937—Dec., 1937—CBS—(100)—"Romantic Rhythms."

(Fisher Body)

Aug., 1933—NBC Red (56)—"Prize Contest for Model Fisher Body Coach."
Aug., 1934—CBS (57)—Fisher Body's Craftsman Guild Dinner, Talk and Music.
Aug., 1935—CBS (41)—Fisher Body's Craftsman Guild Dinner, Talk and Music.
Mar., 1937—CBS (51)—"Fisher Body Craftsman Guild."

(Oldsmobile)

Sept., 1931—NBC (Pacific Coast program)—Details not available.
Jan., 1932—NBC Blue (45)—"Gala Broadcast—Coast to Coast—Various stars—Whiteman, Bebe Daniels."
Jan., 1933-Apr., 1933—NBC Red (38)—"Geo. Olson's Orchestra, Ethel Shutta, Gus Van."
Sept., 1933-Dec., 1933—CBS (43-66)—Parade of the Champions. All-star program.
Feb., 1934-May, 1934—CBS (61)—Johnny Green's orchestra.
May, 1934-July, 1934—CBS (38)—Richard Himber.
Aug., 1934-Oct., 1934—CBS (53)—Leon Belasco, Ted Husing.
Oct., 1936-Apr., 1937—NBC Red (70)—"Irwin S. Cobb."

(Pontiac)

July, 1927—NBC Red (26)—Musical Dramatization of an Indian's Day.
Jan., 1932-Aug., 1932—NBC Blue (47)—"Paul Whiteman's Orchestra, Jane Frohman and special choir."
Dec., 1932-June, 1933—CBS (52)—Stoopnagle and Budd, Andre Kastelanetz.
Aug., 1933-Sept., 1933—CBS (52)—Don Ross.
Dec., 1933-Mar., 1934—CBS (61)—Pontiac Surprise Party.
Oct., 1936—still on—CBS (59)—"News Through Woman's Eyes."
Jan., 1937-June, 1937—NBC Red (70)—"Pontiac Varsity Show," with John Held, Jr.
Oct., 1937-Dec., 1937—NBC Red (68)—"Varsity Show."
Oct., 1936-Apr., 1938—CBS (59)—"News Through a Woman's Eyes."

HUDSON MOTOR CAR CO.

Jan., 1929-May, 1929—NBC Blue (35)—"Hudson Essex Challengers" with Essex Quartet.

(Terraplane)

Feb., 1933-June, 1934—NBC Red (40)—"B. A. Rolfe's Orchestra"; after April, 1934, "The Terraplane Cavalcade" and "Hudson Vocalians."
Dec., 1934-May, 1935—CBS (71)—Kate Smith's New Star Revue, Orchestra and Guest Stars.

(Hudson)

Apr., 1934-June, 1934—NBC Blue (17)—"B. A. Rolfe's Orchestra"; after April, 1934, "The Terraplane Cavalcade" and "Hudson Vocalians."
Oct., 1937-Mar., 1938—CBS (78) "Hobby Lobby."

GRAHAM-PAIGE CORP.

Jan., 1931-June, 1931—CBS (48)—Detroit Symphony Orchestra.

NASH MOTOR CO.

July, 1927—NBC Red (29)—Harry Reser's Orchestra with Van & Schenck.
June, 1931-Aug., 1931—NBC Red (50)—"Max Bendix World Fair Band" with dramatic skit.
Dec., 1935-Jan., 1936—CBS (88)—Nash Christmas Party and New Year Pageant. All Star Cast Including Beatrice Lillie, L. Barrymore, A. Woollcott, Noel Coward, etc.
Oct., 1936-June, 1937—CBS (55)—"Nash Speed Show."
Sept., 1937—still on—CBS (62)—"Professor Quiz."

PACKARD MOTOR CAR CO.

June, 1931-July, 1931—NBC Blue (43)—"Nathaniel Shilkret's Orchestra and guest opera stars."
Apr., 1934-June, 1934—NBC Blue (18)—"Dr. Damrosch's Orchestra."
Sept., 1934-Mar., 1935—NBC Blue (20)—"Lawrence Tibbett, John B. Kennedy and Wilfred Pelletier's Orchestra."
Sept., 1935-Mar., 1936—CBS (86)—Packard presents Lawrence Tibbett and Don Voorhees Orchestra.
Feb., 1936-May, 1936—NBC Pacific (5)—"Packard Fiesta with Fred Astaire."
Sept., 1936—Mar., 1937—NBC Red (64)—Fred Astaire.

STUDEBAKER CORP.

Apr., 1927—NBC Red (21)—"Studebaker Commanders."
Dec., 1928—CBS (25)—Two broadcasts.
Feb., 1929-Jan., 1931—NBC Red (29)—"Jean Goldkette's Orchestra."
July, 1934-July, 1935—NBC Red (34)—"Studebaker Champions with Richard Himber's Orchestra."
Aug., 1934-Jan., 1935—CBS (40)—Studebaker Champions, Richard Himber and Orchestra.
Feb., 1935-Apr., 1935—CBS (43)—
May, 1935-Apr., 1936—CBS (48).
May, 1936-May, 1937—NBC Blue (31)—"Studebaker Champions with Richard Himber's Orchestra."

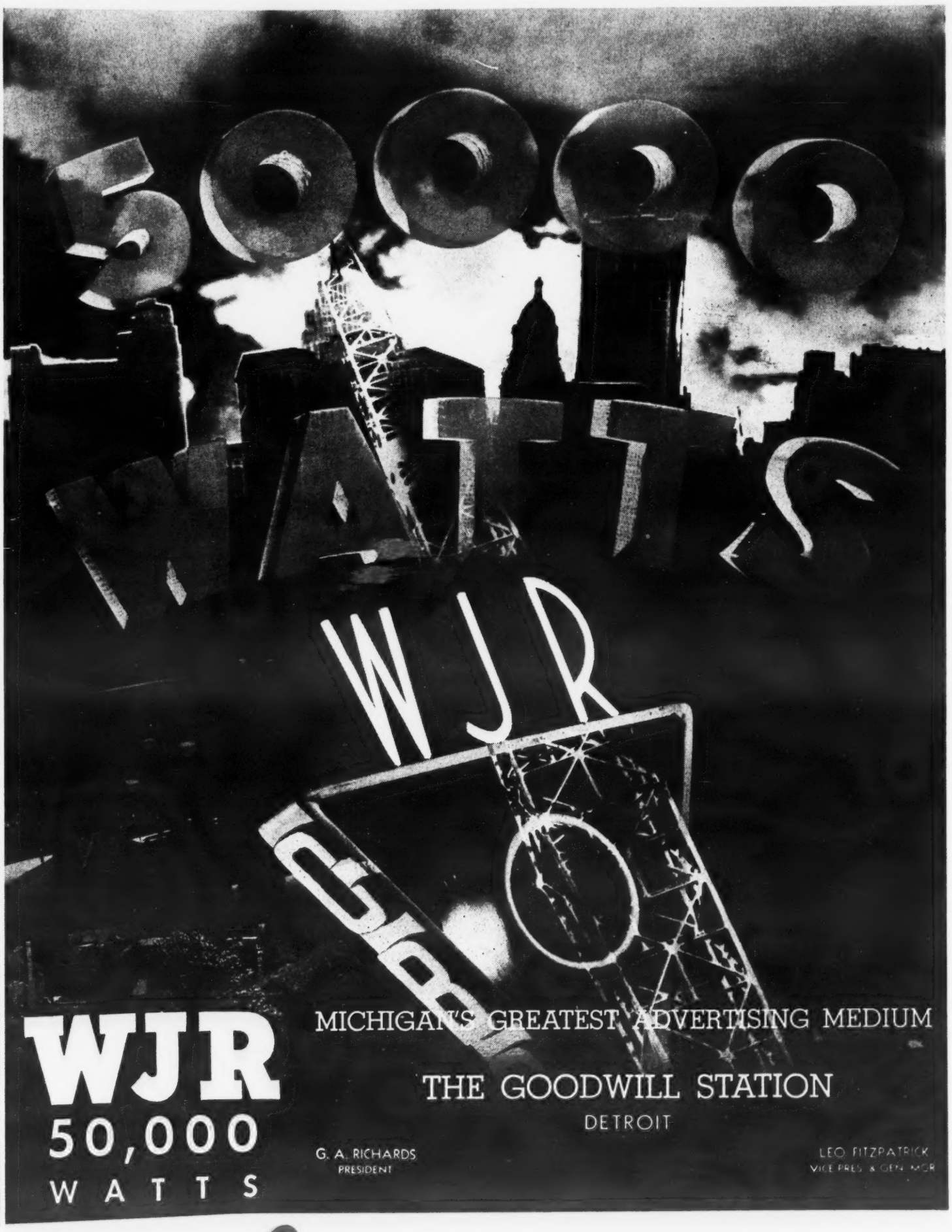
WILLYS-OVERLAND CO.

Sept., 1931-May, 1932—NBC Blue (28)—"Harold Stoke's Orchestra."
May, 1937—Mutual Network—"Kay Kyser's Orchestra."
May-July, 1937—Mutual (36)—"Willys Surprise Party."

Network Expenditures of Individual Advertisers of Automotive Accessories and Tires 1937, First Half 1938

Advertiser	Total 1937	Total 1st ½ '38
Firestone Tire & Rubber Co	$537,634	$300,834
S. C. Johnson & Son*	455,744	409,438
U. S. Rubber Products	.....	292,935
E. I. DuPont—Zerone anti-freeze	600	.....
Total	$993,978	$1,003,207

*Products advertised include automobile polish and floor wax.



Standing of Makes in New Car Sales 1932-1937

Showing Percentage of Each Make to Total Sales

NAME OF MANUFACTURER	YEAR ENDING AS OF DECEMBER 31 1932	1932 % of Industry	1933	1933 % of Industry	1934	1934 % of Industry	1935	1935 % of Industry	1936	1936 % of Industry	1937	1937 % of Industry	Per Cent of 1937 Increase or Decrease 1932	1933	1934	1935	1936
Buick	49,708	4.53	43,809	2.93	63,067	3.34	87,635	3.19	160,687	4.72	205,304	5.89	313.02	368.63	225.53	134.27	27.76
Cadillac	6,269	.57	3,903	.26	4,899	.26	6,692	.24	11,766	.35	11,234	.32	79.20	187.99	129.31	67.87	-4.52
Chevrolet	322,860	29.45	474,493	31.76	534,906	28.32	656,698	23.93	930,250	27.33	768,040	22.05	137.89	61.86	43.58	16.95	-17.44
LaSalle	3,848	.35	3,709	.25	5,182	.27	11,775	.43	13,992	.41	28,906	.83	651.19	679.35	457.82	145.49	106.59
Oldsmobile	24,128	2.20	35,295	2.36	71,676	3.80	149,375	5.44	178,488	5.24	188,302	5.41	680.42	433.51	162.71	26.06	5.50
Pontiac	47,926	4.37	85,348	5.71	72,645	3.85	140,122	5.17	171,669	5.04	212,400	6.10	343.17	148.86	192.38	51.58	23.73
General Motors Total	454,739	41.48	646,557	43.28	752,375	39.84	1,052,297	38.35	1,466,852	43.09	1,414,186	40.60	210.99	118.73	87.90	34.39	-3.59
General Motors—Excluding Chevrolet	131,879	12.03	172,064	11.52	217,469	11.52	395.599	14.42	536.602	15.76	646,146	18.55	389.95	275.53	197.12	63.33	20.41
Ford	258,927	23.62	311,113	20.83	530,528	28.09	826,519	30.12	748,554	21.99	765.933	21.99	195.81	146.19	44.37	-7.33	2.32
Lincoln	3,179	.29	2,112	.14	2,061	.11	2,370	.09	15,567	.46	25,242	.72	694.02	1095.17	1124.74	965.06	62.15
Ford Total	262,106	23.91	313,225	20.97	532,589	28.20	828,889	30.21	764,121	22.45	791,175	22.71	201.85	152.59	48.55	-4.55	3.54
Chrysler	26,016	2.37	28,677	1.92	28,052	1.49	40,536	1.48	58,698	1.72	91,624	2.63	252.18	219.50	226.62	126.03	56.09
De Soto	25,311	2.31	21,260	1.42	11,447	.61	26,952	.98	45,088	1.32	74,421	2.13	194.03	250.05	550.14	176.12	65.06
Dodge	28,111	2.56	86,062	5.76	90,139	4.77	178,770	-6.51	248,518	7.30	255.264	7.33	808.05	196.60	183.19	42.79	2.71
Plymouth	111,926	10.21	249,667	16.71	302,557	16.02	382,985	13.96	499,580	14.68	462,268	13.27	313.01	85.15	52.79	20.70	-7.47
Chrysler Total	191,364	17.45	385,666	25.82	432,195	22.88	629,243	22.93	851,884	25.02	883,577	25.36	361.73	129.10	104.44	40.42	3.72
Chrysler Motors—Excluding Plymouth	79,438	7.25	135,999	9.10	129,638	6.86	246.258	8.97	352,304	10.35	421,309	12.09	430.36	209.79	224.99	71.08	19.59
Terraplane	28,788	2.62	35,831	2.40	40,510	2.15	53,838	1.96	78,371	2.30	74,208	2.13	157.86	107.11	83.18	37.83	-5.31
Hudson	8,641	.79	2,946	.20	19,307	1.02	21,587	.79	20,825	.61	15,819	.45	83.07	436.97	-18.07	-26.72	-24.04
Hudson-Terraplane Total	37,419	3.41	38,777	2.60	59,817	3.17	75.425	2.75	99.296	2.91	90,027	2.58	140.59	132.17	50.50	19.36	-9.33
LaFayette					9,301	.49	17,445	.64	16,304	.48	‡	.....	.....	.....	.....	.....	.....
Nash	20,233	1.85	11,353	.76	14,315	.76	17,739	.65	26,766	.79	70,568	2.03	248.78	521.58	392.97	297.81	163.65
Nash Total	20,233	1.85	11,353	.76	23,616	1.25	35,184	1.28	43,070	1.27	70,568	2.03	248.78	521.58	198.81	100.57	63.84
Auburn-Cord	11,981	1.09	5,038	.34	5,536	.29	5,163	.19	3,022	.09	1,292	.04	-89.21	-74.36	-76.66	-74.98	-57.25
Franklin	1,829	.17	1,329	.09	360	.02	**	.....	.....	.....	**	.....	.....	.....	.....	.....	.....
Graham	12,858	1.17	10,128	.68	12,887	.68	15,965	.59	16,439	.48	13,987	.40	8.78	38.10	8.54	-12.39	-14.92
Hupmobile	10,794	.98	6,726	.45	6,566	.35	7,450	-.27	1,556	.05	396	.01	-96.33	-94.11	-93.97	-94.69	-74.55
Packard	11,058	1.01	9,081	.61	6,552	.35	37,653	1.37	68,772	2.02	95,463	2.74	763.29	951.24	1357.00	153.53	38.81
Pierce-Arrow	2,692	.25	2,152	.14	1,740	.09	875	.03	787	.02	166	.....	-93.83	-92.92	-90.46	-81.03	-78.91
Reo	3,870	.35	3,623	.24	3,854	.20	3,894	.14	3,146	.09	**	.....	.....	.....	.....	.....	.....
Studebaker	41,968	3.83	36,242	2.43	41,560	2.20	39,573	1.44	67.835	1.99	70,054	2.01	66.92	93.30	68.56	77.02	3.27
Willys	25.898	2.36	15,667	1.05	6,576	.35	10,439	.38	12,423	.36	51,418	1.48	98.54	228.19	681.90	392.56	313.89
Miscellaneous	7,590	.69	8,230	.55	2,334	.12	1,858	.07	5,294	.16	1,441	.04	-81.01	-82.49	-38.26	-22.44	-72.78
GRAND TOTAL—U. S.	1,096,399	100.00	1,493,794	100.00	1,888,557	100.00	2,743,908	100.00	3,404,497	100.00	3,483,752	100.00	217.74	133.21	84.47	26.96	2.33

*Indicates those percentages representing a decrease. **Not in production. ‡Combined with Nash decrease.

MOTOR VEHICLE PRODUCTION* AND WHOLESALE VALUE

(Compiled by Automobile Manufacturers Assn.)

	PASSENGER CARS Number	Value	MOTOR TRUCKS Number‡	Value‡	TOTAL CARS AND TRUCKS Number	Value
§1900	4,192	$4,899,443	.....	.....	4,192	$4,899,443
1901	7,000	8,183,000	.....	.....	7,000	8,183,000
1902	9,000	10,395,000	.....	.....	9,000	10,395,000
1903	11,235	13,000,000	.....	.....	11,235	13,000,000
§1904	22,419	23,682,492	411	$946,947	22,830	24,629,439
1905	24,550	39,030,000	450	970,000	25,000	40,000,000
1906	33,500	61,850,000	500	1,050,000	34,000	62,900,000
1907	43,300	92,040,000	700	1,360,000	44,000	93,400,000
1908	63,500	135,250,000	1,500	2,550,000	65,000	137,800,000
§1909	127,731	159,918,506	3,255	5,230,023	130,986	165,148,529
1910	181,000	215,340,000	6,000	9,660,000	187,000	225,000,000
1911	199,319	225,000,000	10,681	21,000,000	210,000	246,000,000
1912	356,000	335,000,000	22,000	43,000,000	378,000	378,000,000
1913	461,500	399,902,000	23,500	44,000,000	485,000	443,902,000
§1914	543,679	413,859,379	25,375	45,098,464	569,054	458,957,843
1915	895,930	575,978,000	74,000	125,800,000	969,930	701,778,000
1916	1,525,578	921,378,000	92,130	161,000,000	1,617,708	1,082,378,000
1917	1,745,792	1,053,505,781	128,157	220,982,668	1,873,949	1,274,488,449
1918	943,436	801,937,925	227,250	434,168,992	1,170,686	1,236,106,917
1919	1,657,652	1,461,785,925	275,943	423,326,621	1,933,595	1,885,112,546
1920	1,905,560	1,809,170,963	321,789	423,249,410	2,227,349	2,232,420,373
†1921	1,518,061	1,091,752,452	164,304	169,914,098	1,682,365	1,261,666,550
†1922	2,369,089	1,561,740,645	277,140	231,282,063	2,646,229	1,793,022,708
†1923	3,753,945	2,274,554,488	426,505	317,478,940	4,180,450	2,592,033,428
†1924	3,303,646	2,040,706,519	434,140	326,706,496	3,737,786	2,367,413,015
†1925	3,870,744	2,544,528,799	557,056	470,634,763	4,427,800	3,015,163,562
†1926	3,948,843	2,746,064,722	556,818	468,752,769	4,505,661	3,214,817,491
†1927	3,083,360	2,265,633,102	497,020	435,072,641	3,580,380	2,700,705,743
†1928	4,012,158	2,703,753,500	588,983	459,045,380	4,601,141	3,162,798,880
†1929	4,794,898	2,981,141,842	826,817	595,504,039	5,621,715	3,576,645,881
†1930	2,910,187	1,720,652,104	599,991	405,949,915	3,510,178	2,126,602,019
†1931	2,038,183	1,153,907,947	434,176	272,748,305	2,472,359	1,426,656,252
†1932	1,186,185	650,781,297	245,282	142,264,003	1,431,494	793,045,300
†1933[1]	1,627,768	795,304,780	358,440	192,131,509	1,985,909	987,436,289
1934	2,270,566	1,204,376,351	599,397	332,913,985	2,869,963	1,537,290,336
1935	3,387,806	1,788,635,180	732,005	399,211,522	4,119,811	2,187,846,702
1936	3,807,371	2,041,000,000	809,486	455,000,000	4,616,857	2,496,000,000
1937	4,068,935	2,397,717,534	947,502	573,310,107	5,016,437	2,971,027,641

†Figures for 1921 to date are "factory sales" for U. S. plants and "production" for Canadian plants.
*Foreign assemblies of parts made in U. S. but assembled abroad are included in this table.
§From United States Census reports. 1900 for fiscal year ended June 30, 1900.
‡A substantial portion of the number of trucks reported comprise chassis only without body; hence the value of bodies for these chassis are not included.
[1]—Differs from monthly figures compiled by U. S. Census Bureau which includes estimates by some companies, while these figures represent actual annual totals.

Men Employed on Federal, State Highway Construction

Month	Men Employed on all Federal and Federal-aid Highway Construction* Fiscal Year 1935	Fiscal Year 1936	Fiscal Year 1937	Fiscal Year 1938	Total Men Employed on all Federal and State Highway Construction and Maintenance* Fiscal Year 1935	Fiscal Year 1936	Fiscal Year 1937	Fiscal Year 1938
July	129,205	335,223	191,041	159,484	332,277	549,203	375,442	334,536
August	111,211	297,224	178,756	163,331	329,813	531,034	382,846	351,853
September	115,047	247,880	143,455	152,784	337,973	498,151	340,073	346,444
October	154,016	210,079	135,660	143,617	384,029	450,322	323,374	330,942
November	185,860	201,046	118,898	121,394	420,069	426,603	290,523	314,067
December	174,358	147,101	103,493	85,365	362,031	323,700	252,229	255,530
January	154,154	96,594	82,731	54,899	315,989	240,414	202,884	196,858
February	156,814	81,257	70,418	49,713	306,090	221,406	200,451	177,675
March	144,053	90,999	86,050	51,229	296,265	217,539	227,586	179,420
April	187,657	123,063	132,834	67,829	345,278	282,740	287,478	213,802
May	271,972	167,535	193,269	98,179	466,504	331,000	374,191	272,316
June	336,414	193,263	237,330	114,373	545,013	362,339	423,466	294,240
TOTAL (man-months)	2,120,761	2,191,264	1,673,935	1,262,202	4,441,331	4,434,451	3,680,543	3,267,683

*No local road or city street employment included in foregoing table.
Data supplied by National Highway Users Conference.

World Production of Motor Vehicles

	1936 Passenger Cars	Trucks & Buses	Total	1937 Passenger Cars	Trucks & Buses	Total
U. S.	3,676,063	778,472	4,454,535	3,915,889	893,085	4,808,974
Canada	131,308	31,014	162,322	153,046	54,417	207,463
Total	3,807,371	809,486	4,616,857	4,068,935	947,502	5,016,437
Austria	4,466	809	5,275	4,820	1,223	6,043
Belgium	60	474	534	1,750	633	2,383
Czecho.	11,158	983	12,141	12,186	1,627	13,813
Denmark	.....	250	250	.....	250	250
Finland	.....	200	200	.....	144	144
France	178,354	23,383	201,737	176,958	24,976	201,934
Germany	240,292	57,220	297,512	267,652	64,242	331,894
Hungary	.....	465	465	120	495	615
Italy	.....	.....	.....	66,000*	.....	66,000
Japan	6,784	2,848	9,632	5,150	9,280	14,430
Netherlands	.....	.....	.....	.....	40	40
Poland	1,200	1,200	2,400	1,500	700	2,200
S. Russia	9,900	128,500	138,400	18,176	180,947	199,123
Spain	NA	NA	NA	NA	NA	NA
Sweden	875	3,576	4,451	1,796	4,830	6,626
Switzerland	6	290	296	.....	700	700
Utd. King.	367,142	114,305	481,447	377,597	112,769	490,366
Total	820,237	334,503	1,154,740	933,705	402,856	1,336,561
Gd. Total	4,627,608	1,143,989	5,771,597	5,002,640	1,350,358	6,352,998

NA means not available. *Includes trucks and buses.

World Automobile Production and Exports of Complete Vehicles in 1936 and 1937

	Production 1936	1937	Exports 1936	1937	Percent of Prod. Exp. 1936	1937
United States	4,454,115	4,808,974	285,756*	395,196*	6.4%	8.2%
Canada	162,159	207,463	55,570	65,866	34.2	31.8
Total	4,616,274	5,016,437	341,326*	461,062*	7.3%	9.1%
Austria	5,275	6,043	985	1,527	18.6	25.2
Belgium	534	2,383	142	252	26.5	10.5
Czechoslovakia	12,141	13,813	1,113	2,067	9.1	14.9
Denmark	250	250	.....	.....	.....	.....
Finland	200	144	5	4	2.5	2.7
France	201,737	201,934	21,401	25,116	10.6	12.4
Germany	297,512	331,894	36,189	68,246	12.1	20.5
Hungary	465	615	.....	.....	.....	.....
Italy	44,000	66,000	11,774	33,337	26.7	50.5
Japan	9,632	14,430	3,998r	3,316r	41.5	22.9
Netherlands	.....	40	813c	1,013c	.....	.....
Poland	2,400	2,200	14.6z	14.9z	.....	.....
Spain	NA	NA	NA	NA	.....	.....
Sweden	4,451	6,626	2,637e	4,417e	59.2	66.6
Switzerland	296	700	55	102	18.5	14.5
United Kingdom	466,335	490,366	81,713	98,549	17.5	20.0
U. S. S. R.	138,400	199,123	1,854	2,850q	1.3	1.4
Total	1,183,628	1,336,561	162,679	240,796	13.7%	18.0%
Grand Total	5,799,902	6,352,998	504,005	701,858	8.6%	11.0%

*Foreign assemblies exported as "parts for assembly" are not included. rIncludes units assembled in Japan and some cycle cars. cIncludes used vehicles and units assembled in Netherlands. zMetric tons. eIncludes units assembled in Sweden. qFirst nine months only.

AUTOMOTIVE NEWS FAMILY ALBUM

AN industry is composed, in the last analysis, not of land, buildings or machinery, nor even capital invested, patents owned nor number of stockholders—

—an industry *is* the men who make it!

This new feature of the Automotive News Almanac is therefore incorporated for the purpose of parading, face-to-face, the men who today are contributing their brains, their acumen and their energy to keeping "the world on wheels!"

This Album is obviously incomplete, and altho we tried diligently to make it comprehensive, still there are omissions of important individuals who should be included here.

In some instances photographs and biographies which we requested have not been furnished in time to be included in this first Album, in others it may be a case of pure oversight, but in any event we hope these omissions will be called to our attention and the material furnished so that no one will be overlooked in next year's Family Album.

The Editors.

ADAMS, CYLDE M., with Bohn Aluminum & Brass Corp. as asst. sales mgr., since 1924. Born Topeka, Kan., July 13. Engineering at Univ. of Kansas. Entered automotive business in 1915 at Detroit, with Aluminum Castings Co. as stores clerk.

ADAMS, JAMES R., MacManus, John & Adams, Inc., exec. vice-pres. since 1934. Born Monroe City, Ind., 1898. Indiana and Notre Dame universities. Entered automotive business in 1924 at Detroit with Critchfield & Co. as advertising copywriter on Ford account.

AHRENS, DON E., Cadillac Motor Division, vice-pres. and gen. sales mgr. since 1935. Born Lodgepole, Nebr. B. S. Elec. Engr. Nebraska university. Delta Upsilon fraternity. Entered automotive business in 1916 at Kansas City with own company as manager.

AKERS, FOREST H., with Dodge Div. Chrysler Corp. as vice-pres., dir. of sales, since 1921. Born Meridian, Dec. 31, 1886. Entered automotive business in 1914 at Lansing, Mich., with Reo Motor Car Co., as traveling rep.

ALDEN, HERBERT W. Timken-Detroit Axle Co., since 1909. Now chairman of board. Born Lynndonville, Vt. Dec. 20, 1870. Mass. Inst. of Technology, B.S. in Mech. Eng. Entered industry in 1895, with Pope Mfg. Co., as asst. chief eng. First pres. of SAE.

ANDERSON, ANTHONY C., General Motors Corp. comptroller since 1936. Born Ludington, Mich. Ferris Institute. Entered automotive business in 1909 at Flint, Mich. with Weston Mott Co. as production clerk.

ANDERSON, DAVID E., with Bohn Aluminum & Brass Corp. as chief engineer since 1925. Born Rockford, Ill., Aug. 27, 1885. Technical high school. Entered automotive business in 1904 at Chicago, with Monarch Motor Car Co., as draftsman.

ANGELL, WILLIAM R., Continental Motors president since 1930. Born at Jessup, Ia., Feb. 10, 1877. Schooling: High school, Kent College of Law, degree LLB. Entered automotive business in 1916 at Detroit, with Continental Motors Corp. as secretary.

ANIBAL, BENJAMIN H., with Pontiac Motor Division as vice-pres. in chge. of engr., since 1926. Born in Michigan, B.S. (eng.) from Mich. State College. Tau Beta Pi, honorary eng., fraternity. Entered automotive business 1909, with Olds as draftsman.

AVERY, CLARENCE W., with The Murray Corp. of America, as pres. and chmn. of board, since 1928. Born Dansville, Mich., Feb. 15, 1882. Ferris Institute and Univ. of Mich. Entered automotive business in 1912 at Detroit with Ford Motor Co., as student.

BABCOCK, IRVING B. Yellow Truck & Coach Mfg. Co. pres., gen. mgr. since 1935. Born Milwaukee. June 21, 1891. L.L.B. from DePaul U. Phi Delta Alpha. Entered car business in 1916 at E. Moline, Ill. with Root & Vandervoort Eng. Co. as accountant.

BACHMAN, BENJAMIN B., with Autocar Co., as vice-pres. of engr., since 1929. Born Philadelphia, Oct. 4. General schooling. Entered automotive business in 1905 with Autocar as draftsman.

BAITS, STUART G., Hudson Motor Car Co., vice-pres. since 1936 and asst. gen. mgr. since 1934. Born Dowagiac, Mich., 1891. U. of Mich. B.E.E. degree. Sigma XI. Tau Beta Pi. Entered industry in 1914 at Detroit with Hudson Motor Car Co., as draftsman.

BANCROFT, GEO. H., with Willys-Overland Mtrs., Inc. as gen. pur. agt., since 1930 (became asst. pur. agt. in 1920). Born Michigan, 1888. Univ. of Michigan. B.S., mech. engr. Entered automotive business in 1919 at Pontiac with Pontiac Motor Car Co., by-product sales.

BARIT, A. EDWARD, with Hudson Motor Car Co., as pres., gen. mgr. since 1936. Entered automotive business in 1906 at Detroit, with Chalmers.

BASTER, FOREST S., with White Mtr. Co. as chief engr., since 1937. Born Gates Mills, O., Nov. 12, 1896. B.S. from Case School of Applied Science. Entered automotive business in 1919 at Detroit, with Packard Mtr. Car Co. as asst. engr. of design analysis.

BATHRICK, DONALD U., with Pontiac Motor Div., as asst. gen. sales mgr., since 1934. Born Battle Creek, Mich., Mar. 4, 1894. Culver and B. A. from Univ. of Mich. Beta Theta Pi fraternity. Entered automotive business in 1921 at Chicago, with Ford Mtr. Co. as roadman.

BATTERMAN, JOHN J., Gabriel Co. pres. since 1932. Born Chicago, Ill., 1882. Attended public and technical schools. Entered automotive business in 1912 at Detroit with Scripps Booth Co. as general manager.

BAUER, GEORGE F., with Automobile Manufacturers Assn. as export mgr. since 1920. Born Port Jervis, N. Y., Feb. 21, 1892. High school and miscellaneous courses. Entered automotive business in 1920 at New York with A.M.A. as export mgr.

BAUMAN, JOHN NEVIN, The White Motor Co., vice-pres. in charge of sales since 1935. Born Jeannette, Pa. U. of M., degree, M.E. Entered automotive business in 1923 at Cleveland with the White Motor Co. as junior salesman.

BAYNE, JOSEPH E., Chrysler Division, Chrysler Corp., dir. of sales since 1938. Born Detroit, 1902. Attended Detroit Junior College. Entered automotive business in 1924 at Detroit with John H. Thompson Co. as salesman.

BECKWITH, CARLETON B., with New Departure Division as adv. mgr., since 1911. Born New Hartford, Conn., July 30, 1888. B.S. from Amherst. Phi Delta Theta fraternity. Entered automotive business in 1911 with New Departure as clerk, sales dept.

BELDEN, JOSEPH CONGDON, Belden Mfg. Co., pres., since 1902. Born Chicago, 1876. Yale college, B.S. degree. Entered automotive business in 1926 at Chicago with Belden Mfg. Co. as president.

BELFIE, ALBERT H., Buick, director of merchandising since 1938. Born Houghton, Mich. 1900. Michigan Tech. Mining degree. Entered automotive business in 1919 at Lansing with Olds as timekeeper.

BEMENT, AUSTIN F., Grace & Bement, Inc. vice-pres. and gen. mgr., since 1935. Born Toledo, 1891. Attended Toledo public schools. Entered automotive business in 1912 at Toledo with Electric Auto-Lite Co. as adv. mgr.

BENDIX, VINCENT pres. Bendix Aviation Corp. since organization in 1924. Schooling: Grade school, high school and "Self". Entered automobile business 1907 at Chicago with Bendix Automobile Mfg. Co. as pres.

BEREND, FRANK A., Pontiac Motor Co., adv. mgr. since 1934. Born Chicago 1893. Attended Crane Tech. Entered automotive business in 1933 at Detroit with Chevrolet as asst. adv. mgr.

BERKELEY, HARRISON C., with Inland Mfg. Div., GM Corp., as gen. sales mgr., since 1929. Born Hanover County, Va., 1881. Episcopal High School, Univ. of Va. Beta Theta Pi, Phi Delta Phi fraternity. Entered automotive business in 1929 at Dayton, O., with Inland Mfg. as gen. sales mgr.

BIGGERS, JOHN DAVID, with Libbey - Owens - Ford Glass Co., as pres., since 1930. Born St. Louis, 1888. A. B. from Univ. of Michigan. Sigma Alpha Epsilon fraternity. Entered automotive business in 1926 at London, Eng., with Dodge Brothers, Britain, Ltd., as managing dir.

BLACK, ROBERT F., White Motor Co. pres., since 1935. Born Harrisburg, Pa., 1889. Princeton University. Entered automotive business in 1911 at Indianapolis with Mais Motor Truck Co. as salesman.

BLEES, WILLIAM A., with Nash Mtrs. Div., as gen. sales mgr. since 1938. Born Macon, Mo., Apr. 14, 1892. Missouri Univ. Kappa Sigma fraternity. Entered automotive business in 1922 at Kansas City with Ford as salesman.

BOHN, CHARLES B., with Bohn Aluminum & Brass Corp., as pres., since 1918. Born Toledo, O., Jan. 20. Entered automotive business in 1902 at Cleveland, O., with Allyne Brass Foundry Co., as mgr.

BOSCOW, A. ROY with Nash-Kelvinator Corp. as adv. mgr., Nash Division since 1937. Born Portland, Ore., Oct. 31, 1895. Univ. of Oregon. Entered automotive business 1923 at Portland Ore. with Ford as parts man.

BRONSON, KARL H., De Soto, director of advertising and merchandising. Attended University of Michigan, Delta Tau Delta fraternity. Entered automotive business in 1917 at Detroit with Dodge Bros.

BROOKS, MELVIN S., with Studebaker Corp. of Canada, Ltd. as pres., Studebaker Export Corp., since 1926; pres. Studebaker of Can., since 1934. Born Port Elgin, Ont., Mar. 27, 1892. High school and technical school. Entered automotive business in 1922 at Toronto, with Ford Motor Co. of Canada, Ltd.

BROTHER, DORAN P., with D. P. Brother & Co., as president. Born in Missouri. Law degree from University of Missouri. Entered automotive business in 1919 with General Motors.

BRUNNER, GEO. L., with Brunner Mfg. Co. as pres. since organizing company in 1907. Born Utica, N. Y. High school. Entered automotive business in 1907 with own company.

BUCKENDALE, LAWRENCE RAYMOND, with Timken-Detroit Axle Co. since 1911. Now vice-pres. in chge. of engr. Born Detroit, 1892. U. of M., B.M.E. degree. Entered automotive business in 1911 at Detroit with Timken - Detroit Axle Co. as tracer.

BURKE, JOSEPH D., Dodge Division, Chrysler Corp., as dir. of truck sales since 1932. Born Detroit, 1893. LaSalle Business Sales Training. Entered automotive business in 1909 at Detroit with EMF as student.

AUTOMOTIVE NEWS FAMILY ALBUM

BUTTERFIELD, CLAYTON W., with Bendix Products Division as adv. mgr. since 1936. Born Algonac, Mich. Syracuse University, Psi Upsilon fraternity. Entered automotive business in 1916 at Syracuse, N. Y. with Brown, Lipe, Chapin Co. as stock chaser.

CAMPBELL, C. ALFRED, with Marmon-Herrington Co., Inc. as gen. sales dir., since 1937. Born Bellefontaine, Ohio, July 16, 1895. A. B., B.C.E., from Sorbonner, Ohio State Univ. Entered automotive business in 1920 at Indianapolis with Nordyke & Marmon Co., as asst. sales ext. mgr.

CAMPBELL, ROWLAND, with Reo Motor Car Co. as acting pres., chmn. of board, since 1937. Born Cross Hill, S. C., 1892. University of Chicago. DKE fraternity. Entered automotive business in 1937 at Lansing with Reo as chmn. of board.

CANADAY, WARD M., with Willys-Overland Motors, Inc., as chmn. of board. Born New Castle, Ind., 1885. A. B. degree from Harvard college. Entered automotive business in 1916 at Toledo with Willys-Overland Co. as adv. mgr.

CARPENTER, RALPH EMERSON Sr. with Spicer Mfg. Corp. as vice-pres. and gen. mgr. since 1923. Born Clinton, N. Y. July 23, 1882. Public schools. Entered automotive business in 1918 at Cleveland with Aluminum Castings Co. as asst. to pres.

CASE, STORRS J., with Graham-Paige Motors Corp., as dir. of adv. and sales prom. since 1937. Born Birmingham, Mich., 1903. Missouri Military Academy. Entered automotive business in 1912 at Ferndale, Mich. with Cote Motor Co. as salesman.

CHALFANT, EDWARD P., with National Standard Parts Assn., as exec. vice-pres., since 1926. Born Sparks, Md., 1867. Academy schooling. Entered automotive business in 1901 with International A & V Tire Co., as asst. to pres.

CHAYNE, CHAS. A. with Buick Mtr. Div. as chief engr. since 1936. Born Harrisburg, Pa. 1893. S. B. from Mass. Inst. Tech. Theta Xi fraternity. Entered automotive business in 1926 at Lycoming with Lycoming Mfg. Co. as exp. engr.

CHRYSLER, WALTER P., with Chrysler Corp. as chmn. of board, since 1925. Born Wamego, Kan., 1875. Ellis, Kan., public schools. Entered automotive business in 1912 at Flint with Buick Motor Co. as works mgr.

CLEARY, JAMES M., with Roche, Williams & Cunnyngham, as vice-pres., since 1933. Born Hubbell, Neb., 1887. Univ. of Illinois, A.B.; Northwestern Univ., L. L. B. Phi Beta Kappa, Phi Delta Phi. Entered industry in 1925 with Studebaker as adv. dir.

CLOUGH, HERBERT W., with Belden Mfg. Co. as sales mgr. since 1930. Born Cincinnati, 1896. Univ. of Chicago, A.S. degree. A.T.O. fraternity. Entered automotive business in 1926 at Chicago with Belden Mfg. Co. as salesman.

COALE, H. M. with The Autocar Co. as vice-pres. of sales since 1929. Born Baltimore Dec. 4, 1882. Cornell. B.S. Entered automotive business 1905 at Ardmore, Pa. with The Autocar Co. as draftsman.

COBB, GARDNER M., with General Motors, as sales section - exhibits since 1928. Born Shamokin, Pa. Mercersburg Acad. Entered automotive business in 1924 at Philadelphia with Chevrolet as dist. rep.

COLE, ROY E., with Studebaker Corp. as vice-pres. in chge. of engr., since 1932. Born in Ohio. Ohio State Univ. Entered automotive business in 1908 at Lansing with Olds Motor Works as designer.

COWLING, WM. C., with Willys-Overland Motors, Inc., as vice-pres., since Mar. 1, 1938. Born Wisconsin, July 1, 1884. High and normal school. Entered automotive business June 1914 at Detroit with Ford Motor Co. as asst. gen. traffic mgr.

COYLE, MARVIN E., with Chevrolet Motor Co. as gen. mgr., since 1933. Born Centerville, Pa., Oct. 8, 1887. Fairmount, Ind., high school. Entered automotive business in 1911 at Detroit with General Motors as clerk.

CRAWFORD, FREDERICK C. with Thompson Products, Inc., as pres., gen. mgr. since 1933. Born Watertown, Mass., Mar. 19, 1891. A. B., M.C.E. from Harvard. P.B.K. Entered industry 1916, with Steel Products Co. (later Thompson Products) as supervisor.

CRAWFORD, JAMES M., with Chevrolet Motor Division as chief engr., since 1929. Born Indianapolis, 1886. Entered automotive business in 1906 at Indianapolis with American Underslung as draftsman.

CROSS, FREDERICK R., with Stewart - Warner Corp., as dir. of adv. since 1933. Born Houghton, Mich., Feb. 20, 1895. Ph.B. from Kenyon College. Alpha Delta Phi. fraternity. Entered automotive business in 1924 at Chicago, with Alemite Corp. as asst. adv. mgr.

CURTICE, HARLOW H. with Buick Div. of GM Corp. as gen. mgr. since 1933. Born Eaton Rapids, Mich., Aug. 15, 1893. Ferris Institute. Entered automotive business at Flint with A. C. Spark Plug Co. as accountant.

DAVIS, CHARLES S., Borg-Warner Corp. as pres., since 1929. Born Terre Haute, Ind. 1877. De Pauw Univ. and Harvard Univ., A.B. degree. Phi Kappa Psi fraternity. Entered automotive business in 1907 at Muncie, Ind. with Glascock Bros. Mfg. Co. as gen. mgr.

DAVIS, JOHN R., with Ford Motor Co. as gen. sales mgr. since 1937. Born Oil City, Pa., 1894. LL.B. from Detroit College of Law. Sigma Nu Phi. Entered automotive business in 1919 at Detroit, with Ford Motor Co. on sales staff.

DAVIS, S. L. with Hupp Motor Car Corp. as pres. since 1938. Born Chicago, 1893. Northwestern Univ. Entered automotive business 1914 at Chicago with Gamble Mtr. Co. (Hupp Distributors) in charge of wholesale dept.

DAVISON, VERGIL A. with Pontiac Motor Div. as regional mgr. Born Princeton, N. J. June 30, 1894. Easton, Pa., public school, Lafayette college. Elect. Engr. degree. Entered automotive business in 1925 at Antwerp, Belgium, with GM Export Co., as prod. mgr.

DENNEY, FRANK J., with Cadillac Motor Car Co., as adv. mgr., since 1934. Born Philadelphia, 1895. Drexel Institute. I Felta Si fraternity. Entered automotive business in 1929 at Detroit with Campbell-Ewald Co. as publicity writer.

DENNIS, FRED L., with Bendix Products Division as dir. of highway safety since 1935. Born Salem, Mich. High school and correspondence schools. Entered automotive business in 1921 with Studebaker Corp. as distr. at Pittsburgh.

DE VAUX, NORMAN with Hupp Motor Car Corp. as gen. mgr. Born Ohio, 1878. Entered automotive business 1902 at Toledo with Cadillac as salesman.

DeVLIEG, RAY A. with Nash - Kelvinator Corp. as gen. works mgr. of Nash Div. Born Grand Rapids, Mich. Entered automotive business in 1910 at Detroit with Cadillac Mtr. Car Co. as designer.

DEWEY, FRANK H., with Gar Wood Industries, Inc., as gen. mgr. air condn. div., since 1934. Born Charlotte, N. C., 1881. Virginia Polytechnic Institute. Entered automotive business in 1916 at Detroit, with Packard Motor Car Co. as engr. special truck equip.

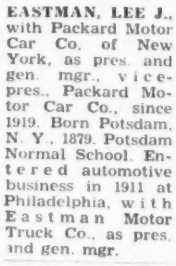
DINGLEY, BERT. with Marmon-Herrington Co., Inc., as vice-pres. since 1932. Born Oakdale, Calif. High school. Entered automotive business in 1902 at San Francisco with Middleton & Boyer, as garage helper.

DORAN, FELIX JR., with Chevrolet Mortor Div. of General Motors Corp., as asst. gen. sales mgr., since Oct. 15, 1933. Born Alta Loma, Tex. University of Dallas. Entered automotive business in 1919, at Ft. Worth, Tex., with Chevrolet Motor Co. of Texas as dist. mgr.

DOUGLAS, Morgan D. with Chevrolet Motor Division as gen. parts and acces. mgr. since 1929. Born Chicago, 1891. Detroit University and Univ. of Michigan. Entered automotive business 1913 at Detroit with Chevrolet Motor Division as rep.

DOWDY, HOMER H., with De Soto Motor Corp. as dir. of serv. since 1928. Born Springfield, Mo., 1894. High school and business. Entered automotive business in 1922 at Detroit with Chevrolet Motor Co., as parts and acces. sales.

DREFS, ARTHUR G. with McQuay - Norris Mfg. Co. as vice-pres. since 1921. Born Buffalo, N. Y., Apr. 5, 1888. B.S. in E.C. from Wharton, Univ. of Penn. Entered automotive business in 1913 at New York, with Miller, Franklin Co., ind. engr.



EASTMAN, LEE J., with Packard Motor Car Co. of New York, as pres. and gen. mgr., vice-pres., Packard Motor Car Co., since 1919. Born Potsdam, N. Y., 1879. Potsdam Normal School. Entered automotive business in 1911 at Philadelphia, with Eastman Motor Truck Co., as pres. and gen. mgr.

EDDINS, DANIEL F., with Plymouth Motor Car Co. as pres. since 1934. Born Waco, Tex. High school. Entered industry in 1911 at Dallas with Studebaker as traveling salesman.

ENGLAND, WILLIAM ERNEST, with American Bantam Car Co., as exec. engr. since 1937. Born Philadelphia. Drexel Institute. Entered automotive business in 1913 at Moline, Ill., with Moline Automobile Co. as draftsman.

EVANS, EDWARD S., with Evans Products Co., pres., since 1915. Born Thaxtons, Va., 1879. Law and library science, Columbia Univ. Entered automotive business in 1915 at Detroit, with Florida Woodenware Co. as sales mgr.

EVANS, Jr., EDWARD S., with Evans Products Co., as exec. vice-pres. since 1935. Born Richmond, Va., 1906. University of Michigan, Psi - Upsilon fraternity. Entered automotive business 1929, at Detroit with Evans Appliance Co. as vice-pres.

EVANS, ROY S., with American Bantam Car Co. as pres. since 1936. Born Bartow, Ga., 1900. Georgia Tech, Theta Chi fraternity. Entered automotive business in 1919 at Atlanta, Ga., with Chandler Distr., as salesman.

EWALD, HENRY T., with Campbell-Ewald Co., as pres., since 1917. Born Detroit, 1885. Detroit public schools. Entered automotive industry in 1906 at Detroit, with E-M-F Automobile Co. as asst. adv. mgr.

FAIRHURST WILLIAM, with Spicer Mfg. Corp., as vice-pres., sales mgr., since 1925. Born Paterson, N. J., 1891. Peddie, Yale. Ph.B., M.E., Sigma Chi fraternity. Entered automotive business in 1914 at Detroit, with Packard Motor Car Co., as apprentice.

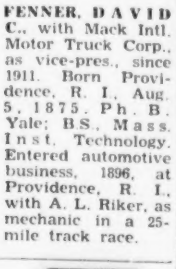
FARRIS, CLAYTON, with Tructor Corp. as pres. since 1927. Born Ft. Smith, Ark. Oct. 2, 1894. St. Johns Mil. Acad., Delafield, Wis. Stevens College M E degree. Chi Pu fraternity. Entered automotive business in 1922 at Newark, with Crane Service Co. as engr.

FAULKNER, ROY H., with Aviation and Transportation Co. as vice-pres. since 1937. Born Pittsburgh, Pa. Feb. 11. High school. Entered automotive business in 1916 with Oakland Pittsburgh Co. as salesman.

FENN, FRANCIS H., with American Bantam Car Co., as vice-pres. gen. mgr., since 1937. Born Jackson, Mich. 1898. U. S. Naval Academy. Entered automotive business in 1935 at Detroit, with Hupmobile as gen. sales mgr.

AUTOMOTIVE NEWS FAMILY ALBUM

FENNER, DAVID C., with Mack Intl. Motor Truck Corp., as vice-pres., since 1911. Born Providence, R. I., Aug. 5, 1875. Ph. B. Yale; B.S., Mass. Inst. Technology. Entered automotive business, 1896, at Providence, R. I., with A. L. Riker, as mechanic in a 25-mile track race.



FERGUSON, MALCOM P., with Bendix Products Div. of Bendix Aviation Corp. as gen. mgr. since June, 1938. Born Elmira Heights, N.Y., June, 1896. Mech. Eng., from Syracuse Univ. Entered automotive business in 1919 at Elmira, N.Y., with Eclipse Machine Co. as engr.

FIELDS, JOSEPH E., with Chrysler Corp., as vice-pres., since 1924. Born Fargo, N. D., Apr. 19. Common school education. Entered automotive business in 1908 at Fargo, N. D., with Buick as a dealer.

FINE, CHARLES A., with Stewart-Warner Corp. as sales mgr. of Alemite Div., since June, 1936. Born at Denver. University of Washington. Entered automotive business in 1913 at San Francisco, with F. Somers Peterson Co., as salesman.

FISH, W. E., with Chevrolet Motor Division, as mgr., coml. car dept., since 1933. Born Pittsburgh, Oct. 17, 1897. Entered automotive business in 1917, at Pittsburgh, with Packard Motor Co., as salesman.

FISHER, WILLIAM A., with General Motors, Fisher Body Div., as vice-pres. and dir., General Motors Corp. Entered automotive business at Detroit, with Fisher Body.

FISKEN, CLARENCE P. with Chevrolet Motor Division as adv. mgr. since 1934. Born Milwaukee, Wis., Apr. 2, 1892. Univ. of Wisconsin. Entered automotive business 1921 at Racine, Wis. with Mitchell Motors Co. as distributor.

FLETCHER, C. SCOTT, with The Studebaker Corp., as sales mgr., since 1937. Born Sydney, N.S.W., 1904. Economics of Business and Commerce degree from Sydney Univ. Entered automotive business, 1921, at Sydney, N.S.W., with The Studebaker Corp., as sales clerk.

FLOGAUS, HOWARD A., with Reo Motor Car Co., as vice-pres. in chge. of engr. Born Clyde, O. American School of Engr., Toledo. Entered automotive business 1914 with Willys-Overland Co. as draftsman.

FORD, EDSEL BRYANT with Ford Motor Co. as pres. and treas. since Dec. 13, 1918. Born Detroit, Nov. 6, 1893. Detroit University School. Entered automotive business 1912 in Detroit with Ford Motor Co.

FORD, HENRY, founder of Ford Motor Company. Born Greenfield, Mich., July 30, 1863. District school, Greenfield, Mich. Entered automotive business in 1903, at Detroit, with Ford Motor Co., as president.

FOY, BYRON C., vice-pres., Chrysler Corp.; pres., De Soto Motor Corp., since 1929. Born Dallas, Tex., June 20, 1893. M.E. from Univ. of Tex., Phi Gamma Delta fraternity. Entered automotive business in 1915, at Dallas, with Ford Motor Co. as traveling representative.

FRANTZ, EMERSON with Bohn Aluminum & Brass Corp. as gen. sales mgr. since 1924. Born Waynesboro, Pa., Dec. 6. High school. Entered automotive business in 1915 at Detroit with Gen. Al. & Brass Mfg. Co. as traffic mgr.

FRAZER, JOSEPH W., with Chrysler Sales Corp., as vice-pres. in chge. of sales, since 1924. Born Nashville, Tenn., Mar. 4, 1892. Yale, Chi Phi fraternity. Entered automotive business in 1912, at Detroit, with Packard Motor Car Co., as mechanic apprentice.

FRUEHAUF, HARVEY C., with Fruehauf Trailer Co., as pres., since 1929. Born Grosse Pointe, Mich., Dec. 15, 1893. High school. Entered automotive business in 1906, at Detroit, with Allyn Brass Foundry, as stock clerk.

FUSON, SAMUEL D., with Arthur Kudner, Inc., as vice-pres. since 1935. Born Missouri. Drury College. Entered automotive business in 1930, at New York, with Erwin Wasey & Co., as pub. dir.

GALLMEYER, ERNEST E. J., with Wayne Pump Co., as vice-pres., dir. of sales since 1934. Born Fort Wayne, Ind., June 29, 1890. Grade school. Entered automotive business 1908 at Fort Wayne, Ind. with S. F. Bowser and Co. as clerk.

GARRETT, PAUL W., with General Motors Corp. N. Y., dir. of public relations, since 1931. Born Lincoln, Kan., Nov. 27, 1891. B.S., Whitman college. A.M., Columbia univ., Phi Beta Kappa, Phi Delta Theta. Entered car business in 1931, with GM, as dir. of public relations.

GELZER, J. A., with Wagner Electric Corp., St. Louis, Mo., as sales mgr., since 1923. Born Charleston, S. C., Sept. 2, 1886. B. S. from Clemson A & M. Entered automotive business in 1913 at St. Louis with Wagner Elec. Corp. as sales engr.

GIRL, CHRISTIAN, with United Specialties Co., as pres. since 1936. Born Elkhart, Ind., 1874. High school. Entered automotive business Jan., 1906, at Cleveland, O., with Perfection Spring Co., as founder and pres.

GOAD, LOUIS C., with A. C. Spark Plug Co. as gen. mgr. since 1938. Born Petersburg, Ind., Feb. 9, 1901. M.E. from Univ. of Illinois. Entered automotive business 1923 at Anderson, Ind. with Delco Remy Corp. as engr.

GOEHRIG, HAL, with Blackhawk Mfg. Co., as sales mgr. since 1938. Born Milwaukee, Wis., 1908. B.A. from Univ. of Wis. Entered automotive business in 1930 at Milwaukee, with present company in factory.

GRACE, EDWARD R., with Grace & Bement, Inc., as pres., treas., since 1935 (formation). Born Detroit, Dec. 9, 1892. Studied Detroit Technology Institute. Entered automotive business in 1907, with Grabowski Truck.

GRAHAM, ROBERT CABEL, with Graham-Paige Motors Corp., as exec. vice-pres., since 1927. Washington, Ind., Born Aug. 21, 1885. B.S. from St. Mary's (Kan.) College, Fordham Univ. Entered automotive business in 1918, at Detroit with Graham Bros., Inc., as vice-pres.

GRAMM, BENJAMIN A., with Gramm Motor Truck Corp., as pres. and treas., since 1925. Born Chillicothe, O., July 30, 1872. M. A. from Ohio Northern Univ. Entered automotive business in 1900 at Chillicothe, O. Originator of own co. among first horseless wagon makers.

GRANT, RICHARD H., with General Motors Corp., as vice-pres., dir.; vice-pres. 1929, dir. 1934. Born Ipswich, Mass., Nov. 26, 1878. A.B. from Harvard. Entered automotive business in 1924, at Detroit, with Chevrolet Motor Co., as gen. sales mgr.

HALL, ERNEST A., with the Hall Mfg. Co. as pres., gen. mgr. since 1923. Born Toronto, Can., 1884. Toronto Univ. Entered automotive business 1901 at Toronto with father (engine builder) as apprentice.

HALL, FRED L., with Bendix-Westinghouse Automotive Air Brake Co., as sales mgr., since 1937. Born Smithville, Mo., Nov. 2, 1902. Entered automotive business, 1930, at Pittsburgh, Pa. with Bendix-Westinghouse Automotive Air Brake Co. as gen. serv. mgr.

HARRINGTON, RALPH H., with General Tire & Rubber Co., as adv. mgr., since 1936. Born Chicago, June 9. Wash. U. Entered automotive business 1919, at Akron, O., with B. F. Goodrich Rubber Co. as branch adjuster and office mgr.

HAVENS, V. CARL, with Oldsmobile as adv. mgr. since 1933. Born Sault Ste Marie, Mich., May 25, 1902. A.B. from University of Michigan. Entered automotive business 1924 at Detroit with Cadillac Motor Car Co. as accountant.

HAWLEY, FRANK M., with Morse Chain Co., as vice-pres. in chge. Detroit plant. Born Ohio. Ohio Wesleyan Univ., Cass School of Applied Science. Alpha Tau Omega fraternity. Entered automotive business in 1912 at Elyria, O., with Garford Co., as draftsman.

HEDNER, EDWARD, with Chevrolet Motor Division, Natl. Dir. of Serv., since 1938. Born Burlington, Vt., Dec. 2, 1893. Grade school. Entered automotive business in 1919 at New York, with Chevrolet as clerk.

HERRICK, DOUGLAS, M., with De Soto Motor Corp., as dir. of regions, since 1932. Born Toledo, Feb. 8, 1897. Univ. of Mich, Chi Phi fraternity. Entered automotive business 1925 at Toledo, with Willys-Overland Co., as statistician.

HITCHCOCK, HUGH W., with Packard Motor Car Co., as asst. adv. mgr., since 1933. Born Detroit, June 5, 1899. West Point and Univ. of Mich. A. B. degree. Entered automotive business, 1922, at Detroit, with Packard Motor Car Co as adv. clerk.

HITER, FRANK A., with Stewart-Warner, Alemite Corp., as vice-pres., gen. sales mgr. since 1920. Born Owensboro, Ky., Mar. 27, 1892. Entered automotive business 1914 at Louisville, Ky. with American Automobile Co. as distributor.

HOFFMAN, PAUL G., with The Studebaker Corp., as pres., since 1911. Born Chicago, Apr. 26, 1891. One year at Univ. of Chi.; honorary degree L.L.D. Rose Polytechnic Ins., Delta Tau Delta. Entered automotive business in 1909 at Chicago, with Halladay Motor Co., as porter.

HOLLER, WILLIAM E., with Chevrolet Motor Div. of General Motors Corp., as vice-pres. and gen. sales mgr. since Oct., 1933. Born Newark, N. J. University of Buffalo. Entered automotive business in 1920, at Flint, with Flint Motor Co., as sales mgr.

HUDSON, RICHARD G., with Studebaker Corp., as mgr. truck div., since 1936. Born Schoolcraft, Mich. A.B. from Kalamazoo College. Entered automotive business in 1920, with Reo Motor Car Co.

HUGHES, FREDERICK G., with New Departure Div., GM Corp., as gen. mgr., since 1911. Born W. Cornwall, Conn., May 1, 1878. Sheffield Sc. School, Yale, Ph.B. in science. Sigma Xi. Entered industry 1907, with Driggs-Seabury Ordnance Corp. as chief engr.

HUGHSON, WILLIAM L., with William L. Hughson Co. as pres. since 1903. Born Buffalo, N. Y., Nov. 13. High school. Entered automotive business 1903 at San Francisco, with Ford Motor Co. as dealer.

HUTCHINSON, B. EDWIN, with Chrysler Corp. as vice-pres., chmn., finance comm., since 1935. Born Chicago, Oct. 2, 1888. Mass. Inst. of Tech., Delta Tau Delta fraternity. Entered automotive business, 1921 at Detroit, with Maxwell Motor Corp. as vice-pres. and treas.

ISHERWOOD, WILSON S. with AC Spark Plug Div., General Motors Corp., as gen. sales mgr., since 1914. Born Petoskey, Mich. High school. Entered automotive business, 1914, at Flint with AC Spark Plug Co., as salesman.

IRELAN, FRANK H., with Delco Brake Division as gen. mgr. since May 1, 1937. Born Darke county, Ohio, Jan. 3, 1893. Indiana Business College. Entered automotive business June 1, 1936 at Dayton, O. with Delco as factory worker, clerk, foreman.

JACOBSON, CHAS. L., with Chrysler Sales Division, as sales mgr. since 1938. Born Paw Paw, Ill., May 29, 1896. Schooling: Kalamazoo. Entered automotive business 1914 at Detroit with Ford Motor Co. in advertising dept.

JAMES, WILLIAM A., with Hudson Motor Car Co., as adv. mgr. since 1921. Born Fall River, Mass. Entered automotive business in 1919 at Detroit with Hudson Motor Car Co. as service manager.

DODGE CELEBRATES ITS

Silver Anniversary

1914 1939

DODGE DEPENDABILITY

For 25 Years DEPENDABILITY Has Been a Dodge Tradition...The Imperishable Foundation Upon Which Dodge Has Built a Great Institution

IN MEXICO with the U. S. Army...in France with the A.E.F....with great explorers Roy Chapman Andrews ...Frank Buck...Armand Denis...in the trackless deserts and jungles of Asia and Africa...and in the hands of more than 4,000,000 owners, Dodge has convincingly proved to the world for 25 years that *Dependability* and *Dodge* are inseparable!

This is the Dodge Tradition. A Tradition that has been a driving urge behind the great organization of brilliant engineers and skilled craftsmen who have gathered under the Dodge banner...a Tradition that demands all their vision and vigilance that Dodge products might ever prove increasingly worthy of this great Dodge heritage.

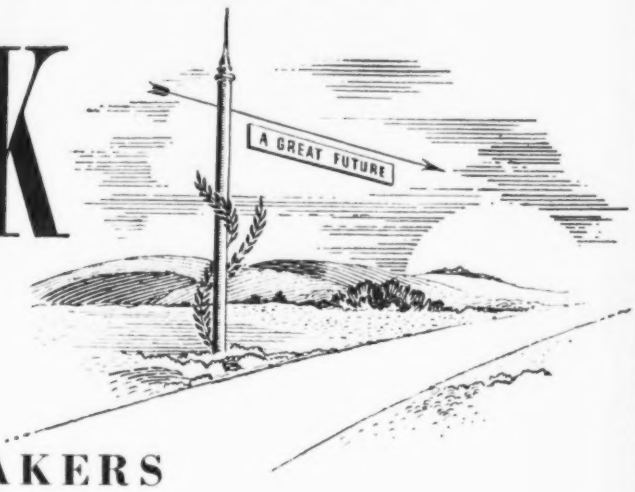
More than that, it is a Tradition which, from the very start, reached far beyond the product itself...a Spirit that has woven itself into the very fabric of everything that Dodge stands for. As thousands of dealers will attest, the Dodge reputation for building dependable products is no stronger than the Dodge reputation for dependability in its relations with these dealers. Furthermore, this reputation has been carried through by Dodge dealers in their relations with the public—so that today Dependability is not only the enviable asset of Dodge, but of every Dodge dealer as well.

As we approach our Silver Anniversary, we salute those dealers whose records of loyalty and service to Dodge ...for 10 years—20 years—25 years...have helped us lay the imperishable foundation of Dependability upon which Dodge has built a great institution.

COMING! THE BIGGEST NEWS DODGE EVER GAVE AMERICA!

Within the next few weeks Dodge will release the biggest news it ever gave America—the exciting story of the new 1939 Silver Anniversary Dodge—a thrilling new kind of car—a fitting triumph of 25 years of fine car building! Watch for the details!

A LOOK FORWARD "and" BACK



By

FOREST H. AKERS

Vice President and Director of Sales, Dodge Division of Chrysler Corporation

WHENEVER we learn that a great business institution has reached an important milestone in its history, we find it interesting to look back across the span of years and examine the principles—the basic policies laid down by its founders—which have been responsible for its success.

That is why we feel that—on the eve of the introduction of our Silver Anniversary Dodge—not only our own dealers, but other dealers as well, will be interested in knowing of the fundamental business principles established by the men who built the first Dodge almost a quarter of a century ago.

Many of you will remember those days in 1914. Whenever a new motor car appeared on the horizon, there was always a mad scramble of men and money of all kinds to get on the new band wagon. It was because of this that the men who built the first Dodge formulated their famous "Three C's" policy for the selection of the dealers who were to represent this new car.

These "Three C's" were—Character, Capability and Capital.

With the emphasis on *Character*. For *Character*, as interpreted by Dodge in those early days, was to be the cornerstone on which the entire Dodge business was to be built. In the product itself, *Character* soon came to be known by another word—*Dependability*. And in the factory's relations with its dealers and its owners, *Character* came to mean that no policy—no new rule—could be established by the factory until it had been measured against the interests of *not only the factory, but the dealer and the owner as well*. Every factory policy, every factory action, *had to be for the good of all three*—or no good at all.

That is the business code on which Dodge operated when it came into this industry in 1914...that is the business code which is responsible for the high position Dodge holds in this industry today....And that is the business code on which Dodge will continue to operate in the future...

With such a foundation beneath us...a foundation which 25 years have proven to be as solid as bedrock... we are confident of the continued progress of the Dodge factory and dealer organization.

Forest H. Akers

AUTOMOTIVE NEWS FAMILY ALBUM

JOHN, W. A. P., with MacManus, John & Adams, Inc., as pres., since 1936. Born New Albany, Ind., Jan. 31, 1895. A. B. from Univ. of Michigan. Entered automotive business, 1916 at Detroit, with Dodge Bros., as clerk in adv. dept.

JOHNSON, JOHN E., with Chevrolet Motor Division, as asst. gen. sales mgr. since 1938. Born Marquette, Mich., 1892. Teacher's degree from Univ. of Minnesota. Entered automotive business Feb. 1923 at Janesville, Wis., with Chevrolet as dist. mgr.

JOHNSTON, EDWARD A., with International Harvester Co. as vice-pres. in chge. of engr. and patents since 1934. Born at Brockport, N. Y., Aug. 1, 1875. Entered automotive business 1898 at Chicago with McCormick Harvesting Machine Co., as designer and inventor.

JUDSON, FRANK W., with Pittsburgh Plate Glass Co., as vice-pres. Born at Farmington, Minn., Oct. 3, 1879. High school. With above company since leaving high school.

KALEY, HARRY W., with Ethyl Gasoline Corp., as gen. sales mgr., since 1937. Born Johsonburgh, Pa. B.S. (petroleum engrg.) from Penn State, Delta Chi fraternity. Entered automotive business in 1927, at Pa. with Ethyl Gasoline Corp., as field representative.

KEATING, THOS. H., Chevrolet Motor Co. of General Motors., as assistant general sales manager, since 1937. Born Brooklyn, N. Y., Aug. 9, 1894. Entered automotive business in 1916, at New York City, with Chevrolet Motor Co., as clerk, car test dept.

KELLER, GEORGE D., with The Studebaker Corp., as vice-pres. in chge. of sales, since 1935. Born Denver, Colo. Entered automotive business in 1914, at Los Angeles, Calif., with The Studebaker Corp., as car order clerk.

KELLER, K. T. with Chrysler Corp. as pres. and gen. mgr. With corp. since Apr. 1, 1926. Born Mount Joy, Pa., Nov. 27, 1885. Business school, high school, Lancaster Pa. Entered automotive business 1909 at Pittsburgh with Westinghouse as asst. gen. foreman.

KELLY, DANIEL H., with Electric Auto-Lite Co., as exec. vice-pres., since 1919. Born Crestline, O., Nov. 11, 1883. L.L.B. from Toledo Univ. Entered industry in 1919 at Toledo, with Electric Auto-Lite Co. as asst. sales mgr., Willys Light Div.

KETTERING, CHARLES FRANKLIN, with General Motors Corp., as gen. mgr., research labs., 1920. Born Loudonville, O., 1876. Ohio State Univ. D.S. and D.E. from several schools. Entered automotive business in 1912 at Dayton, O. with Delco as part owner.

KINDL, CARL H., with Delco Products Div. of GM Corp., as gen. mgr., since 1936. Born Pittsburgh, Dec. 15, 1895. B. S. in E. E. from Carnegie Tech., Delta Upsilon fraternity. Entered automotive business in 1919 at Pittsburgh, with Westinghouse Elec. & Mfg. Co., as elec. engr.

KISHLINE, FLOYD F., with Willys-Overland, as asst. chief engr., since 1938. Born Lincoln, Neb., 1894. High school and correspondence. Entered automotive business in 1914 at Detroit, with Krit Motor Car as expr. mech.

KLINGLER, HARRY J., with Pontiac Motor Division as gen. mgr. since 1933. Born St. Clair, Mich. University of Michigan. Entered automotive business in 1924 at St. Louis, Mo., with Chevrolet as zone mgr.

KNAPP, HERBERT W., McQuay-Norris Mfg. Co., as secy. and dir. of sales since 1914. Born Olathe, Kan., 1895. High school. Entered automotive business 1914 at Denver, Colo., with McQuay-Norris Mfg. Co., as salesman.

KNUDSEN, WILLIAM S., with General Motors Corp., as pres. since 1937. Born Copenhagen, 1879. Entered automotive business in 1911 at Buffalo, N. Y., with Keim Mills as fact. mgr.

KOCH, JOSEPH M. with Quaker State Oil Refining Corp. as director of sales since 1924. Born Sunbury, Pa., Aug. 14, 1891. Carnegie Tech. Entered automotive business 1914 at Pittsburgh with E. F. Houghton & Co. as special rep.

KOETHER, BERNARD G., with General Motors Corp., as direc. of sales sect. 1923-1937. Born Newark, N. J., Feb. 6, 1879. Entered automotive business in 1901 at Harrison, N. J., with Hyatt Roller Bearing Co., as acct.

KROEGER, FREDERICK C., with Delco-Remy Division, GM. as gen. mgr. since 1929. Born Winona, Minn., Apr. 27, 1888. B.S.E. from Purdue Univ., Acacia, Tau Beta Pi fraternity. Entered automotive business, 1913 at Anderson, Ind. with Remy Electric Co. as research engr.

KUDNER, ARTHUR H. with Arthur Kudner, Inc. as pres. Born Lapeer, Mich. Entered automotive business 1915 at New York with Cheltenham Agency as copywriter.

LAUBACH, HAROLD C., with Gar Wood Industries, Inc., as gen. mgr., tank div., since 1934. Born Duluth, Minn., Dec. 24. Specialized training. Entered automotive business in 1931, at Duluth, with Gar Wood, as gen. mgr., tank div.

LEUKHART, GEO. A., with National Used Car Market Report, Inc., as gen. mgr., since 1930. Born Indianapolis. Business administration. Entered automotive business prior to 1910, at Indianapolis, with Atlas Engine Works.

LEWELLEN WENDELL, G., with Chevrolet Motor Division, as asst. Gen. sales mgr., since 1937. B.A. from De Pauw University. Delta Upsilon fraternity. Entered automotive business in 1919 at New York City with Chevrolet Motor Co., as blue print boy.

LIPPARD, THOMAS R., with Stewart Motor Corp. as pres. since 1912. Born Anna, Ill., May 3. Concord Institute. Entered automotive business in 1907 at Syracuse, N. Y., with Franklin Automobile Co., as asst gen. mgr.

LITCHFIELD, PAUL W., with Goodyear Tire & Rubber Co., as pres. since 1926. Born Boston, Mass., July 26, 1875. B.S. from Mass. Inst. of Tech. Entered automotive business in 1900 at Akron with Goodyear Tire & Rubber Co. as supt.

LITTLE, JOSEPH P., with General Motors Truck & Coach, as vice-pres. since 1932. Born Manchester, Conn., Feb. 13, 1889. B.A., M.A., from Yale. Betta Theta Pi. Entered automotive business in March, 1919, as asst. supt. at Motor and Axle Plant, Chevrolet Motor Co., Flint.

LUNDGREN, A. (ARTHUR), with Burd Piston Ring Co.—Liberty Foundries Co., as vice-pres., sales mgr., since 1922. Born E. Gary, Ind., Nov. 4, 1892. Grade school, business college. Entered automotive business in 1912 at Chicago, with Mercury Mfg. Co., as office clerk.

MACAULEY, ALVAN, with Packard Motor Car Co. as pres. and dir. since 1916. Born Wheeling, W. Va. LLB. Also Honorary Doctor of Laws from Geo. Wash. and U. of Michigan. Entered automotive business in 1910 at Detroit, with Packard Motor Car Co. as gen. mgr.

MacDONALD, WALLACE A., with Hupp Motor Car Corp., as vice-pres. in chge. of sales, since 1935. Born Buffalo, N. Y., Mar. 5, 1892. One year at Oberlin College. Entered automotive business in 1913, at Detroit, with Hupp Motor Car Corp., as dist. mgr.

MacGREGOR, B. N., with Packard Electric Division of GM as gen. mgr. since 1933. Born Princeton, Ind. June 22, 1894. B.S. from Purdue Univ., Muskingum College. Entered automotive business in 1919 with Packard Elec. Co. as salesman.

MACPHERSON, C. D., with Gar Wood Industries, Inc., as sales mgr. since 1920. Born Detroit Nov. 4, 1890. Northwestern University. Entered automotive business in 1910 at Detroit with Packard Motor Car Co as mgr. truck special equip.

MARTIN, GERALD S., with American Bantam Car Co., as pur. agt. since 1937. Born Chicago. Special shop course from Purdue. Entered automotive business in 1919 at Elyria Div. Willys-Overland as asst. to supt.

MASON, GEORGE W., with Nash-Kelvinator Corp., as pres. since January, 1937. Born Valley City, N. D., Mar. 12, 1891. B. S. from Univ. of Michigan, Phi Kappa Sigma. Entered automotive business in 1913 at Detroit with Studebaker Corp. in mfg. dept.

MAUDER, EDWARD P. with Cadillac as gen. mgr., New York branch. Born New York June 28, 1888. Public high school. Entered automotive business in 1908 at New York with H. S. Houpt, "Thomas Flyer" distributor as stenographer.

MAXWELL LLOYD, with Roche, Williams & Cunnyngham as 1st. vice-pres. since 1932. Born Hicksville, O., Aug. 3, 1879. University of Chicago. Entered automotive business in 1909 at Chicago with Staver Motor Car Co. as gen. sales mgr.

McAFEE, WILLIAM FORT, with International Harvester Co., as sales mgr. since January, 1937. Born Macon, Ga., Mar. 4, 1880. A.B. from Duke University, Sigma Nu. Entered automotive business in 1925 at Chicago with present company as mgr. motor truck sales.

McALEER, CHARLES H., with McAleer Mfg. Co., as pres. since 1923. Born Pittsburgh, Pa. June 25, 1893. Entered automotive business in 1923 at Detroit with present company as pres.

McCUEN, CHARLES L., with Olds Motor Works Div. as gen. mgr. since 1926. Born Stockton, Calif., May 22, 1892. (Hon.) B.S. from Polytechnic College of Engineering, Oakland, Calif. Entered automotive business in 1913 at Oakland with Cole-California Car Co. as vice-pres.

McDUFFEE, JOSEPH H., with Electric Auto Lite Co. as vice-pres. since 1937. Born Lawrence, Mass. High school. Entered automotive business 1898 at Newton, Mass. with Stanley Bros. in experimental development.

McINTYRE BROUWER D. with Monroe Auto Equip. Co. as pres. and gen. mgr. since 1937. Born Dundee, Mich. 1905. U. of Michigan. Entered automotive business 1922 at Monroe with Monroe Auto Equip. Co. as salesman.

McINTYRE, jr., CHARLES S., with Monroe Auto Equip. Co. as sec'y and serv. mgr. since 1937. Born Dundee, Mich., May 18, '12. U. of Mich. Entered automotive business 1952 with Monroe Auto Equip. Co.

McINTYRE, WILLIAM D., with Monroe Auto Equip. Co. as vice-pres. and treas. since 1936. Born Dundee, Mich., 1906. Mec. eng. Mich. State College. Phi Delta. Entered automotive business 1929 with present company in eng. dept.

McLAUGHLIN, FRANK J. with Pontiac Motor Division of General Motors Corp. as pur. agt. since 1931. Born Detroit Sept. 17, 1891. Detroit College (Univ. of Detroit.) Entered automotive business 1910 at Detroit with Lozier Motor Co. as buyer.

McLEAN, WILLIAM S., with Fisher Body Corp. as dir. of adv. since 1913. Born Detroit. Detroit Tech. Entered automotive business in 1913 at Detroit with Dodge Brothers as draftsman.

MITCHELL, STANLEY G., with Federal Motor Truck Co. as adv. mgr. since 1913. Born Detroit March 2, 1896. High school. Entered automotive business 1911 at Detroit with Cadillac Motor Car Co as office boy.

MOHR, HUBERT C. with Packard Electric Division, General Motors Corp. adv. and sales promotion mgr. since 1927. Born DeGraff, Ohio. High school and business college. Entered automotive business 1927 with Packard Electric as above.

AUTOMOTIVE NEWS FAMILY ALBUM

MOHUN, W. WARD with Evans Products Co. as vice-pres. since 1935. Born Washington, D. C. Dec. 10, 1887. Geo. Washington and Pennsylvania U's. Kappa Sigma. Entered automotive business 1910 at Phila., Pa. as east. sales mgr., Kritt Motor Car Co.

OCK, HARRY with Plymouth Corp. as vice-pres. since 1930. Born Cleveland. School and college. Entered automotive business 1913 at Denver, Colo. with Colorado Motors, as retail salesman.

MOONEY, JAMES D., with General Motors Corp. as vice-pres. in chge. of overseas operations, corp. dir., since 1923. Born Cleveland, Feb. 18, 1884. B.S., New York Univ.; M.E. and D. Eng. from Case. Sigma Chi, TNU, BGS. Entered industry in 1915 with Hyatt Roller Bearing as sales mgr.

ORRISON RAY L., with Bendix-Westinghouse Auto Air Brake Co., as gen. mgr. since 1937. Born Lawson, Pa., Dec. 1899. Entered automotive business 1924 at Pittsburgh with present company as service rep.

MORSE, E. C., with Chrysler Corp., Export Div. as pres. since 1928; with company since 1924. Born Indianapolis. High school. Entered automotive business in 1910 at Detroit with Hudson Motor Car Co. as gen. sales mgr.

OSS, THOMAS W., with Chrysler Corp. as gen. serv. mgr. since 1933. Born York, England, 1897. Johns College. Entered automotive business in 1914 at Detroit with Chalmers Motor Car Co. parts inspector.

NASH, CHARLES W. with Nash-Kelvinator Corp. as chairman, Board of Directors since 1916. Born DeKalb, Ill., Jan. 28, 1864. Schooling limited to a few grades during winter months. Entered automotive business 1910 at Flint with Buick Motor Co. as pres.

NICOL, JOHN, with Nico-Twin Truck Co., as pres., gen. mgr. since 1927. Born Detroit, 1880. Univ. of Michigan, DKE fraternity. Entered automotive business in 1915 at Chicago with distributor Federal Trucks as pres. of Jon Nicol Co.

NIGHTINGALE, ROBERT JOHN, with Willard Storage Battery Co. as vice-pres. in chge. of sales to mfrs., since 1928; sales mgr., 1909. Born Topeka, June 24. Public schools. Entered automotive business 1898 with Winton as apprentice.

OBEE, MILTON T. with The Aro Equipment Corp. as sales mgr. since May, 1938. Born Toledo, Ohio, 1904. Toledo Univ. Phi Sigma Chi. Entered automotive business 1924 at Toledo with The Hall Mfg. Co. as salesman.

O'KEEFE, DON P., with Chevrolet Motor Co., as gen. pur. agent, since 1921. Born Flint, Mich., Oct. 9, 1882. Notre Dame Univ. Entered automotive business Jan. 1, 1906 at Flint, Mich., with Buick Motor Co., as clerk.

OLEN, WALTER ALFRED, with The Four Wheel Drive Auto Co. as pres., gen. mgr. since 1910. Born Winneconne, Wis., Jan. 31, 1875. L.L.B. from Oshkosh State Normal School, Northern Indiana Law School. Entered industry in 1910 with F.W.D. as pres.

O'NEIL, WILLIAM J., with Dodge Div. Chrysler Corp. as gen. mgr. since 1928. Born Milwaukee, June 10, 1882. High school. Entered automotive business in 1907 at Milwaukee, with Packard as time study.

ORR, VERNE, with Chrysler Motors of Calif., as vice-pres. since 1933. Born Elliott, Iowa, 1887. Art and law degrees from Iowa and Colorado U's., Delta Tau Delta fraternity. Entered automotive business in 1914 in Iowa with Willys-Overland as salesman.

OTIS, JOSEPH E. jr., with Stewart-Warner Corp. as pres. since 1933. Born Chicago, Nov. 19, 1892. St. Paul's School, Concord, N. H., Yale Univ. A.B. Delta Kappa Epsilon. Entered automotive business 1922 at Chicago with Bassick Mfg. Co. as asst. treas.

PACKER, WM. M., with Packard Motor Car Co., as gen. sales mgr. since 1934. Born Pittsburgh, 1896. High school. Entered automotive business in 1925 at Minneapolis with Chevrolet Motor as city salesman.

PEED, ROY L. G., with De Soto Motor Corp., as vice-pres. since 1928. Born New Castle, Ind. High school. entered automotive business in 1908 with Maxwell Briscoe as mechanic.

PHELPS, ARTHUR G., with Delco-Remy Division, GM, as sales mgr., since 1936. Born Chicago, Oct. 11. High school. Entered automotive business in 1912 at Dayton, O., with Dayton Engineering Laboratories Co., in prod. dept.

PILE, J. HOWARD, with Chek-Chart Corp., as editorial director since 1931. Born Mansfield, O., Dec. 29, 1887. Univ. of Penna. Entered automotive business in 1909 at Philadelphia, Pa., with Hall Gas Engine Wks. as designer and tester.

RADOYE, GILBERT U. with Gar Wood Industries, Inc. as gen. pub. director since 1936. Born New York City. Special training, two years' journalistic course. Entered automotive business 1916 at Detroit with Hudson Motor Car Co. as adv. assist.

RALSTON, DAVID E., with Oldsmobile Division, as vice-pres., gen. sales mgr. since 1933. Born Argyle, Ill., Mar. 4, 1889. Northwestern Univ., Phi Kappa Psi. Entered automotive business in 1911 at Rockford, Ill., with Willys-Overland as dealer mechanic and salesman.

REED, RODMAN S. with Brockway Motor Co., Inc., as Chief engr. since 1912. Born Syracuse, N. Y. Sept. 18, 1880. High school. Entered automotive business in 1901 at Syracuse, N. Y. with H. H. Franklin Mfg. Co. as draftsman.

REEDER, JOHN F., with Young & Rubicam, Inc., as vice-pres., mgr. Det. ofc. since 1934. Born Toledo O., April 29, 1903. B. S. from Dartmouth, Psi Upsilon. Entered automotive business in 1925 at Toledo with United States Advertising Agency in copy dept.

REEVES, ALFRED, with Automobile Mfg. Assn. as vice-pres., gen. mgr. since 1914. Born Brooklyn, N. Y. Brooklyn high school. Entered automotive business in 1903 at New York with N. Y. Evening Mail as Automobile editor.

RICH, ELMER with The Simoniz Co. as pres. since 1910. Born Detroit. Entered automotive business 1910 at Chicago with The Simoniz Co. as pres.

RITCHIE, PRESCOTT C., with Waukesha Motor Co. as adv. mgr. since 1927. Born Chicago, 1886. B.S. from Univ. of Wis. DU fraternity. Entered automotive business in 1910 at Kenosha, Wis. with Thos. B. Jeffery Co. (Rambler) as serv. dept. tech. corresp.

ROBERTSON, SAMUEL B., with B. F. Goodrich Co. as pres. since 1938. Born Milton, Mass., July 21, 1878. Massachussets Institute Technology. Entered automotive business in 1919 with Goodrich.

ROCKWELL, WILLARD F., with Timken-Detroit Axle Co., as pres. since 1933. Born Boston, Mass., Mar. 31, 1888. Attended Massachusetts Institute of Technology. Entered automotive business in 1912 with F.I.A.T.

RODGER, DAVID W., with Feredal Mogul Corp. as vice-pres., secretary, director of sales since 1916. Born Detroit, Aug. 3, 1893. Entered automotive business in 1916 at Detroit with present company.

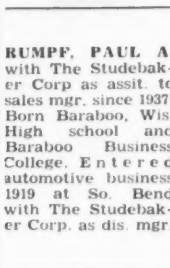
ROOS, DELMAR G., with Willys-Overland Motors, Inc., vice-pres. in chge. of eng. Born New York, N. Y. Oct. 11, 1887 M.E., E.E. from Cornell. Entered automotive business in 1912 with Locomobile Co. of America as asst. research engr.

ROTHMAN, EDWARD E., with MacManus John & Adams, as vice-pres., since 1937. Born Detroit, 1899. B. S. (economics), from Michigan State College and Univ. of Penn. Entered automotive business in 1921 at Detroit with Campbell-Ewald Co., as office boy.

ROWLAND, ROLAND M., with De-Soto Corp. as asst. gen. sales mgr. since 1931, '34, '36, '38. Born Lewiston, Ill., Aug. 4, 1890. Studied for ministry at Lombard College. Entered automotive business in 1914 at Detroit with Maxwell Motor Co as chassis lecturer.

RUARK, BRYANT W., with Motor and Equipment Wholesalers Assn., as gen. mgr., since 1922. Born Southport, N. C., Jan. 16, 1892. A.B. from Duke University and Detroit College of Law. Entered automotive business in 1918 at Toledo, with Champion Spark Plug as salesman.

RUDDON, R. W., with Federal Motor Truck Co since 1914, as pres., gen. mgr. since Jan. 1938. Born Detroit, Sept. 5, 1890. High school. Entered automotive business in 1911 at Detroit as secretary to treasurer of General Motors.



RUMPF, PAUL A. with The Studebaker Corp as assit. to sales mgr. since 1937. Born Baraboo, Wis. High school and Baraboo Business College. Entered automotive business 1919 at So. Bend with The Studebaker Corp. as dis. mgr.

SCARRATT, ALBERT, W., with International Harvester Co., as asst. to vice-pres. of engr. since 1936. Born St. Paul, Minn., April 16, 1886. M.E. from Univ. of Minn. Entered automotive business in 1913 at Minneapolis, Minn., with Minneapolis Steel & Mach'y Co. as tractor engr.

SCHAEFER, KENNETH M., with Federal Motor Truck Co., as gen. sales mgr since 1937. Born Monroe, Mich. Two years of college. Entered automotive business in 1920 at Detroit with Paige Motor Car Co. as chief road tester.

SCHMIDT, RUDOLPH H. with Four Wheel Drive Auto Co. as gen. sales mgr. since 1927. Duluth, Minn. Feb. 6, 1894. High school. Entered automotive business 1916 at Clintonville, Wis. with present company.

SEAHOLM, ERNEST W., with Cadillac Motor Car Division, as chief engr., since 1922. Born Lidkoping, Sweden, Dec. 27, 1887. High school. Entered automotive business in 1910 with Parker Transmission and Appliance Co., as chief designer.

SECRIST, COURTLAND C. with Victor Mfg. & Gasket Co. as sales mgr. since 1920. Born Malta, Ill., 1883. High school. Entered automotive business 1920 at Chicago with Victor Mfg. & Gasket Co. as sales mgr.

SEIBERLING, JAMES PENFIELD, with Seiberling Rubber Co., as pres. since Feb., 1938. Born Akron, O., July 3, 1898. B.S. from Princeton; L.L.B. from Univ. of Mich. Entered automotive business in 1922 at Akron with present company as salesman.

SEUBERT, ADOLPH F., pres. The American Swiss Co. since 1928; vice pres. and gen. mgr. The Toledo Steel Products Co. since 1931. Born Toledo. High school. Entered industry at Toledo in 1912 with National Malleable as gen. supt.

SEUBERT, EDWARD G., with Standard Oil Company of Indiana, as pres., since 1927. Born Syracuse, N. Y. Syracuse schools. Entered automotive business in 1891 at Whiting, Ind., with Standard Oil Co. (Indiana), as mechanic's helper.

SHAPIRO, SAMUEL B., with Chicago Automobile trade Assn., as gen. mgr. since 1938. Born Chicago, Ill., Nov. 15, 1907. Ph.B. from Univ. of Chicago. Phi Beta Kappa. Entered automotive business in 1933 at Chicago with Authorized Ford execu. secy.

SHARLOCK, HERBERT L., with Bendix Aviation Corp. as dir. public relations since 1920. Born Preston, Canada. High school and business college. Entered automotive business in 1910 at Owensboro, Ky. with Ames Automobile Co. as stockholder and director.

AUTOMOTIVE NEWS FAMILY ALBUM

SHAW, EDWARD C., with Chevrolet Motor Division, as gen. supt. of assembly plants, since 1937. Born Rosebush, Mich., Nov. 23, 1892. Entered automotive business in 1911 at Flint, Mich., with Buick Motor Co., in paint dept.

SHIELDS, JOHN H., with Superior Body Co., as vice-pres., treas., since 1925. Born Allen county, Lima, O., Aug. 29, 1902. Entered automotive business in 1925 at Lima, O., with Superior Body Co., as shop superintendent.

SILVEY, KARL I. with Roche, Williams & Cunnyingham, Inc., Chicago as Studebaker resident rep. since 1935. Born Roachdale, Ind., 1900. Indiana Univ. B.A. Delta Tau Delta. Entered automotive business 1926 with Export Div., Studebaker Corp. as Editor "Overseas News".

SIMPSON, CECIL P. with Pontiac Motor Division as gen. sales mgr. since 1935. Born Roby, Texas, Jan. 13, 1893. Two years at Texas Polytechnic. Entered automotive business in 1923 at Los Angeles, Calif., with Chevrolet Mtr. Co. as rep.

SLOAN, ALFRED P. JR. General Motors Corp. Chairman since May 3, 1937. Born in New Haven, Conn. May 23, 1875. Schooling: High school in Brooklyn, Massachusetts Institute of Technology, degree BS. Entered automotive business in 1896 at Newark, N. J., with Hyatt Roller Bearing Co. as draftsman.

SMITH, HOWARD C. with Stewart Motor Corp. as chief engineer since 1930. Born Buffalo, N. Y. 1889. Technical High of Buffalo, (draftsmanship). Entered automotive business 1904 at Buffalo with Buffalo Pitts Co. as draftsman.

SPEAKS, CHARLES E., with Fisk Rubber Corp., as pres. since 1936. Born Washington, D. C., May 21, 1887. High school. Entered automotive business in 1911, at Washington, D. C. with Ford as distributor.

STAMBAUGH, THOMAS H., with Hudson Motor Car Co. as dir. natl. serv. oper. since 1933. Born Sharon, Pa., 1890. High school, Bus. Ad. and coml. law, Kansas School Technology. Entered automotive business 1909 at Lansing with Oldsmobile in service division.

STEPHENSON, WALTER B., with Delta Electric Co. as pres., gen. mgr., since originating business in 1913. Born Jasper, O., June 1, 1884. High school and corres. studies. Entered industry with Delta in 1918 making automobile spotlights.

STIFFLER, CHAS. B., with United Motors Service, as gen. mgr., since 1938. Born Rushville, Ind., Dec. 28, 1890. High school and special courses in accounting and business admn. Entered automotive business in 1919 at Detroit, with General Motors Corp. as chief accountant.

STOUT, GEORGE W., with The Perfect Circle Co. as adv. mgr., since 1924. Born New Castle, Ind., Jan. 25, 1903. University of Illinois. Phi Delta Theta fraternity. Entered automotive business in 1924 at Hagerstown, Ind., with The Perfect Circle Co. as sales corres.

STOUT, WM. B., with Stout Engineering Laboratories, Inc., as pres. since 1919. Born Quincy, Ill., March 16, 1880. Hamline U.; U. of Minn. Tau Beta Pi. Entered automotive business in 1915 at Detroit with Scripps-Booth Co. as engr.

STRITCH, GEORGE J. with B. F. Goodrich Co. as mgr. mfrgs. sales since 1938. Born Louisville, Ky., Apr. 7, 1892. Springfield high school. Entered automotive business 1917 at Akron, O. with B. F. Goodrich Co. as salesman.

STRUBLE, ALLEN L., with Reo Motor Co. as asst. gen. sales mgr. since 1929. Born Shepherd, Mich., 1894. Life certificate, C. S. N. S. Sigma Upsilon Psi. Entered automotive business 1914 at Alma, Mich. with Republic Truck Co. as cost acct.

SUTTNER, FRED J. with Stewart Motor Corp. as sales mgr. since 1912. Born Buffalo, Mar. 26, 1886. Buffalo State Normal. Entered automotive business 1908 at Buffalo with E. R. Thomas Mtr. Car. Co. as inspector in machine shop.

TEETOR, DON H., with The Perfect Circle Co. as sales mgr. since 1931. Born Hagerstown, Ind., 1903. A.B. from Pomona College, Univ. of Illinois. Entered automotive business in 1927 at Hagerstown, with Perfect Circle in inventory dept.

TEETOR, LOTHAIR. with The Perfect Circle Co. as pres. since 1938. Born Hagerstown, Ind., March 30, 1897. Two years at Pomona, (Wis.) College. Phi Delta Theta. Entered automotive business 1920 at Hagerstown, Ind. with The Perfect Circle Co. as sales mgr.

TIEDMANN, A. CARL, with Nash-Kelvinator Corp. as sales mgr. of Great Lakes Div. since August 1937. Born New York. Military school and A.B. from C. C. N. Y. Entered automotive business in 1914 at New York, N. Y. with Willys-Overland, Inc., as retail salesman.

TIMMENS, FRANK J., with Dodge Div. Chrysler Corp. as gen. sales mgr., since 1923. Born Mar., 1895. Batavia, N. Y., public; Buffalo high school; Univ. of Detroit. Entered automotive business in 1921 at Detroit, with Owen & Graham Co., as sales prom. mgr.

TONGUE, ARTHUR E., with Chrysler Sales Corp. as dir. of adv. and sales prom. since 1936. Born Brooklyn, N. Y., Oct. 6, 1897. Two years of college. Entered automotive business in 1936 at Detroit with Chrysler Sales Corp.

TOWLE (Capt.), H. LEDYARD, with Pittsburgh Plate Glass Co. as dir. of adv. and creative design, since 1934. Born Brooklyn. Adelphi College. Pratt Institute, studied and painted abroad. Entered industry in 1924 with du Pont as director Duco Color Advisory Service.

TRACY, WILLIAM R., with Hudson Motor Car Co. as vice-pres. in chge. of sales, since 1930. Born East Smithfield, Pa. Entered automotive business in 1910 at Detroit, with Regal Motor Car Co. as branch mgr.

TREVELLYAN, HERBERT A., with Oldsmobile Division, as asst. gen. sales mgr. since 1933. Born Chicago, Oct. 25, 1897. Entered automotive business in 1915 at Chicago with Mack Truck Co., as a mechanic.

van DER ZEE, A. with Chrysler Corp. as vice-pres. since Mar., 1938 (Joined Chrysler July, 1927) Born Jersey City, Aug. 18, 1893. High school, business administration, and automobile mechanics. Entered automotive business 1916 at New York with Chevrolet Motor Co. as retail salesman.

VINCENT, JESSE G., with Packard Motor Car Co. as vice-pres. of engr. since 1912. Born Charleston, Ark., Feb. 10, 1880. Mechanical engineering, Int. Corresp. School. Honorary M.E., Univ of Mich. Entered industry in 1910 with Hudson Motor Car Co. as chief engr.

WACKER, FREDERICK G. pres., Automotive Maintenance Machinery Co., and pres. Motor & Equipment Mfts. Assn. since 1922. Born Chicago, May 6, 1889. Yale. A.B. Alpha Delta Phi. Entered industry 1912 with Toledo Steel Barrel Co. as vice-pres.

WARNER, JOHN A. C. with Society of Automotive Engineers, Inc. as secy. and gen. mgr. since 1930. Born Putnam, Conn., July 12, 1893. Worcester Polytechnic Inst. B. S. in Mech. Sigma Xi, Tau Beta Pi. Entered industry in 1917 with U. S. Bur. of Standards as lab. research asst.

WATSON, C. FRED, with Studebaker Corp. as director of truck sales since 1936. Born Muskegon, Mich., Feb. 20. A.B. and Bus. Adm. from Univ. of Michigan. Alpha Sigma Phi. Entered automotive business in 1910 at Muskegon, Mich. with Continental Motors as cost accountant.

WECKLER, HERMAN L. with Chrysler Corp. as vice-pres. in charge of operations since 1938. Born Pittsburgh, Aug. 31, 1883. Carnegie Tech. Entered automotive business 1911 at Flint with Buick as mechanical supt.

WEINIG, ROBERT F. with Zenith Radio Corp. as sales mgr. of auto and farm radios since 1936. Born Dover, Ohio, Apr. 19, 1903. Dartmouth. B. S. Phi Gamma Delta. Entered automotive business 1936 at Chicago with Zenith as sales mgr. of auto radios.

WHERRETT, HARRY S. with Pittsburgh Plate Glass Co. as pres. since 1928. Born Connersville, Ind., Oct. 24, 1876. High school. Entered automotive business in Pa. 1895 with Pittsburgh Plate Glass Co. in sales dept.

WHITTAKER, CHESTER K. with Studebaker Corp. as vice-pres. Parent Co. at So. Bend; pres. Calif. subsidiary since 1923. Born Springfield, Mo. Nov. 28, 1889. Two years of engineering at Univ. of Colo. Phi Gamma Delta. Entered automotive business 1911 at Meadville, Pa. with Overland dealer.

WIDMAN, CHARLES H. with Murray Corp. as vice-pres.; director of sales since 1929. Born Rochester, N. Y., June 17, 1879. Univ. of Mich. Eng. and law. Sigma Chi. Entered automotive business 1916 with J. C. Widman & Co. as above.

WILLIS, FRANK B. with Bendix Products Division as vice-pres. in chge. of sales since 1933. Born Waterloo, Ind. Indianapolis Business Univ. Entered automotive business in 1900 at Indianapolis with Carl G. Fisher Automobile Co., as bookeeper and salesman.

WILSON, DAVID R., with Willys-Overland Motors, Inc. President since 1936. Born at Warren, O., Nov. 15, 1874. Akron High School. Entered automobile business 1901 at Lansing, Mich. with Oldsmobile Co. as superintendent.

WINANS, EARL W., with Federal Motor Truck Co. as Chief Engr. since 1932. Purdue, B. S. Entered Automobile business in 1908 at Hartford Conn. with Columbia Electric Co.

WITT, FRED R., with Thompson Products, Inc., as adv. mgr., since 1925. Born Detroit, Mich., Oct. 11. A.B. from Western Reserve. Delta Upsilon fraternity. Entered automotive business in 1922 at Cleveland, with Thompson Products, Inc., in adv. dept.

WONDRIES, CHARLES H. with The Studebaker Corp. as director, national accounts division since Oct., 1937, with company since 1925. Born Chicago. Univer. of Chicago, Stanford Univ. B.A. Sigma Alpha Epsilon. Entered automotive business 1919 at Los Angeles with White.

WOOD, CURTS, W., with Chevrolet Motor Division as zone mgr., Davenport, Ia. since April 1, 1938. Born Andover, O. March 16, 1895. Ohio University. Entered automobile business in 1917 at Cleveland with Chevrolet as retail salesman.

WOODALL, HERBERT J., with Woodall Industries, Inc. as pres. since 1919. Born Detroit, Mich. Sept. 25, 1893. Detroit University School. Entered automobile business in 1913 in Detroit with Cadillac Motor Car Co. as factory messenger.

WRIGHT, WALTER F., with Graham Paige Mtrs. Corp. as vice pres. and gen. sales mgr. since April 1938. Born Prairie Depot, O., May 1, 1886. High school. Entered automobile business in 1912 at Toledo with Willys-Overland Co. as mgr. inquiry dept.

YOUNG, FRED M., with Young Radiator Co., as pres., since 1927. Born Muskegon, Mich., Apr. 29, 1893. Four years night school, mech. engr., special studies, M.I.T. and Army aeronautical training. Entered automotive business in 1923 with Perfex Radiator Co. as sales engr.

YOUNGREN HAROLD T., with Olds Motor Works Div. of G. M. as chief engineer since 1933. Born Oakland, Calif. May 1, 1892. High school and Tech night. Entered automobile business in 1912 at Sheboygan Falls, Wis. with Falls Motor Co. as draftsman.

ZEDER, FRED M. with Chrysler Corp. as vice-chairman of board. Born Bay City, Mich. March 19, 1886. Univ. of Michigan, B. S., Tau Beta Pi; Sigma Xi. Entered automobile business in 1910 at Detroit with E. M. F. Co. as engineer in charge of laboratories.

ZORNIGER, FRANK E. with Chevrolet Motor Div. as zone mgr. since 1929. Born Indianapolis March 22. High school and night school. Entered automotive business in 1908 at Elkhart, Ind. with Guy Warren Garage as mechanic's helper.

Who's Who

(Continued from Page 47)

pres.; D. R. Hodges, secy.-treas.; W. B. Haislup, sales mgr.; H. L. Martin, adv. mgr.; C. P. Kottlowski, engr.; C. R. Ramage, pur. agt. **Det. Rep.**—R. A. Schakel, Indianapolis, Ind. **Adv. Agcy.**—Kirkgasser-Drew, Wrigley bldg., Chicago, Ill.

DIAMOND T MOTOR CAR CO., 4517 W. 26th st., Chicago, Ill. Diamond T motor trucks. C. A. Tilt, pres., gen. mgr., treas.; S. A. Cook, vice-pres., secy.; E. J. Bush, vice-pres., sales mgr.; C. A. Peirce, vice-pres. in chge. of engr. and prod.; Thomas Ware, asst. treas.; J. L. Krickl, asst. sales mgr.; W. S. Baldwin, adv. mgr.; H. C. Emberson, pur. agt.; W. A. Breinig, asst. pur. agt. **Adv. Agcy.**—Roche, Williams & Cunnyngham, Inc., 310 S. Michigan ave., Chicago, Ill.

DIBBLE COLOR CO., 1497 E. Grand blvd., Detroit, Mich. Dibble lacquers, enamels, paints and varnishes; also Pratt and Lambert products. R. A. Pulfer, pres., gen. mgr.; E. W. Farmer, asst. gen. mgr.

DICKEY-GRABLER CO., 10302 Madison ave., Cleveland, O. Metal stampings, dies and tools, steel stamps, stencils, metal checks, name plates. W. J. Primrose, vice-pres., sales mgr., adv. mgr., pur. agt.; D. A. Miller, treas.

DIETZ, R. E. CO., 60 Laight st., New York, N. Y. Headlites, searchlites, floodlites, foglites, flares, direction signals, marker and clearance lites, roadlites. Robert E. Dietz, pres.; Arthur W. Carr, secy.; S. F. Woodall, asst. secy., sales mgr.; A. M. Stockman, adv. mgr.; C. F. Marchant, pur. agt.; Geo. A. Knapp, works mgr. **Det. Rep.**—W. E. Arnold, 14790 Kilbourne ave. **Adv. Agcy.**—A. M. Stockman Adv. Agency., 30 Vesey st., New York City.

DILL MFG. CO., 700 E. 82nd st., Cleveland, O. Tire valves and parts, tire gauges, air chucks, tube vulcanizing equipment, serial plates. A. P. Williamson, pres., treas.; E. F. Tobold, vice-pres.; A. E. Bronson, secy.; L. F. Body, sales mgr.; A. A. Sump, adv. mgr.; J. C. Crowley, engr.; C. W. Bonnifield, pur. agt.; B. S. Byall, mgr. trade sales. **Det. Rep.**—F. W. Bates, 413 Stephenson bldg. **Adv. Agcy.** — McDaniel-Fisher & Spelman, Inc., Akron, O.

DITZLER COLOR CO., 8000 W. Chicago ave., Detroit, Mich. Automobile lacquers, enamels, undercoats and industrial finishes. E. R. Hoag, pres., gen. mgr.; Wm. T. Utley, vice-pres., secy., pur. agt.; L. E. DuBey, vice-pres.; F. W. Currier, treas.; P. G. Cramp, J. G. Fleming, A. J. Kant, O. C. Hornig, asst. treas.; W. H. Hogben, sales mgr., ind. div.; N. A. Fleming, sales mgr., jobbers div.; L. R. Vivian, asst. adv. mgr.; N. A. Fleming, adv. mgr.; C. E. James, asst. sales mgr. jobbers div.; H. G. Barrett, Geo. K. Graves, asst. sales mgrs. ind. div. **Adv. Agcy.** — Fred M. Randall Co., Detroit, Mich.

DIVCO-TWIN TRUCK CO., 12801 E. Jefferson ave., Detroit, Mich. Retail house-to-house delivery vehicles. F. R. Fageol, chmn.; John Nicol, pres., gen. mgr.; Ray A. Long, vice-pres., sales mgr.; Jas. H. Spencer, secy.; J. J. Daniels, treas.; N. Fine, asst. secy.; L. D. Mead, engr.; C. R. Tetzlaff, pur. agt.; G. E. Muma, works mgr. **Adv. Agcy.**—Frederick L. Lawrence, 1019 Fox Theatre bldg., Detroit, Mich.

DIVERSIFIED PRODUCTS CO., 219 Leib st., Detroit, Mich. Tacking strips, paper welts and seaming cords, automobile body insulation, visors, glove boxes, foundation cardboard. Paul H. Travis, pres.; Elroy O. Jones, vice-pres., secy.; N. B. Goodman, treas.

DIXIE ROAMER TRAILER CO., 5507 Nebraska ave., Tampa, Fla. House trailers. Carl Orcott, owner.

DODGE BROTHERS CORP., Div. of Chrysler Corp., 7900 Joseph Campau ave., Detroit, Mich. Passenger and commercial cars, trucks. W. P. Chrysler, chmn.; K. T. Keller, pres.; W. J. O'Neil, vice-pres., gen. mgr.; A. C. Downey, vice-pres., asst. gen. mgr.; F. J. Lamborn, vice-pres. in chge. of mfg.; Forest H. Akers, vice-pres. in chge. of sales; B. E. Hutchinson, J. E. Fields, W. Ledyard Mitchell, A. vanDerZee, F. M. Zeder, Lester L. Colbert, vice-pres.; H. A. Davies, treas.; R. P. Fohey, secy.; F. J. Timmens, gen. sales mgr.; John W. Hutchins, asst. gen. sales mgr.; E. J. Poag, asst. gen. sales mgr. in chge. of merch. and adv.; J. D. Burke, dir. of truck sales; W. R. Bamford, dir. of serv.; G. B. Allen, chief engr.; D. A. Samson, operating mgr. **Adv. Agcy.**—Ruthrauff & Ryan, Inc., 405 Lexington ave., New York, N. Y.
(See display advertising index)

DOLE VALVE CO., 1901-1941 Carroll ave., Chicago, Ill. Copper tubing fittings, thermostats, thermostatic metals, brass parts for blue prints. Andrew R. Dole, pres.; Arthur Dole, vice-pres.; John L. Dole, secy., sales mgr.; Fred H. Tweed, treas., gen. mgr.; Stuart G. Phillips, adv. mgr.; John Swift, engr.; Wm. H. Drinpelfeld, pur. agt.; R. M. Ellis, F. M. Thomson, sales reps. **Det. Rep.** — Fred Bell, General Motors bldg. **Adv. Agcy.**—Evans Associates, Chicago, Ill.
(See display advertising index)

DOLLIN CORP., 600 S. 21st st., Irvington, N. J. Zinc and aluminum die castings. J. L. Cowen, pres.; E. N. Dollin, vice-pres.; M. Caruso, secy.-treas.; Worcester Bouck, asst. treas. **Det. Rep.**—A. L. Moses Co., 637 New Center bldg.

DONAHUE VARNISH, F. J. CO., 10586-10600 Knodell ave., Detroit, Mich. Varnishes, enamels, paints for all purposes. Thos. P. Danahey, pres.; Ernest A. O'Brien, vice-pres.; M. L. Donahue, secy.; Martin C. Peters, treas. and gen. mgr.

DORMAN STAR WASHER CO., 1004 Sycamore st., Cincinnati, O. Washers, cap screws, nuts, brass fittings, gas and oil lines, expansion plugs, axle nuts, axle and Woodruff keys, door latch springs, water jacket plates, sheet metal screws, clevis pins, clutch bearings, drain plugs, rivets, studs, sprg. center bolts, etc. J. R. Dorman, pres.; H. B. Dorman, secy.; J. R. Dorman, treas.; Edw. Knoth, sales mgr. **Det. Rep.**—Jack Weissman, 1104 Pratt blvd., Chicago, Ill.

DOUGLAS, H. A. MFG. CO., Bronson, Mich. Auto electric parts, switches, sockets, junction blocks, terminals, etc. Karl Johnson, pres.; Karl Krebser, vice-pres., gen. mgr.; Chas. Shewmon, secy.-treas.; T. W. Drury, sales mgr., adv. mgr.; Fay Beal, engr.; C. J. Scribner, pur. agt.

DOUGLAS & LOMASON CO., 5836 Lincoln ave., Detroit, Mich. Rough and finished stampings in all metal, radiator grilles, louvre grilles, medium and small assemblies, rolled shapes of all sizes and descriptions. H. A. Lomason, pres., gen. mgr., treas.; F. W. Bauer, vice-pres.; W. M. Chapman, secy.; T. S. Hough, sales mgr., adv. mgr.; H. W. Finzel, engr.; J. W. Baker, pur. agt.; Wm. Wisckol, gen. supervisor; J. C. Wilson, prod. supervisor; F. W. Bauer, atty.

DOW CHEMICAL CO., Midland, Mich. Industrial chemicals, plastics and plastic materials and Dowmetal. J. T. Pardee, chmn.; W. H. Dow, pres., gen. mgr.; E. W. Bennett, vice-pres., secy.-treas.; L. I. Doan, sales mgr.; W. F. Stumpfig, adv. mgr.; L. J. Richards, engr.; J. E. LeFevre, pur. agt. **Adv. Agcy.**—MacManus, John & Adams, Inc., Fisher bldg., Detroit, Mich.

DRIVER-HARRIS CO., Middlesex st., Harrison, N. J. Special alloys. F. L. Driver, chmn., pres., gen. mgr.; H. D. McKinney, F. V. Lindsey, vice-pres.; E. A. Harleman, secy., pur. agt.; S. M. Tracy, treas.; F. V. Lindsey, sales mgr.; G. V. Corbett, adv. mgr.; F. E. Bosh, engr. **Det. Rep.**—W. E. Blythe, Driver-Harris Co., 638 New Center bldg.

DROP DIES AND FORGINGS CO., 3088 E. 63 st., Cleveland, O. Small and medium size drop forgings and drop forging dies. J. F. Rice, pres., treas; J. E. Rice, vice-pres.; L. W. Rice, secy., pur. agt.; T. W. Johnson, sales mgr.

DRYING SYSTEMS, Inc., 1800 Foster ave., Chicago, Ill. B. B. Russell, chmn., pres., gen. mgr.; R. E. Lippert, vice-pres.; J. C. Moore, secy.; Leo Karpen, treas.; S. R. Porwancher, engr.; S. R. Kouba, pur. agt. **Det. Rep.**—R. E. Lippert, 59 Seward ave.

DRY-ZERO CORP., Merchandise Mart, Chicago, Ill. Insulation for refrigerated truck bodies and buses. N. S. McKay, chmn.; Harvey B. Lindsay, pres.; L. M. Cunningham, vice-pres., gen. mgr., sales mgr.; Donald J. Powers, adv. mgr.; C. Hunter Lindsay, engr. **Adv. Agcy.**—The Fensholt Co., 360 N. Michigan ave., Chicago, Ill.

DUBY, JOHN F. CO., 744 Gallivan blvd., Dorchester, Mass. Wheel aligning gage, wheel-o-liner, camber-caster gage, spindle gage.

DUNLOP TIRE & RUBBER CORP., Buffalo, N. Y. Tires and tubes, "Dunlopillo" cushioning material. E. B. Germain, pres.; Girard Hammond, vice-pres., gen. sales mgr.; R. D. Belden, vice-pres., fcty. mgr.; M. L. Friedman, secy.; H. F. Van Valkenburgh, pur. agt. **Det. Rep.** — Dunlop Tire & Rubber Corp., 3930 Woodward ave. **Adv. Agcy.**—Batten, Barton, Durstine & Osborn, Inc., 1614 Rand bldg., Buffalo, N. Y.

DUNN TEXTILE CO., 862 Maccabee bldg., Detroit, Mich. Upholstery trim, woolen broadcloths, imitation leathers and genuine leathers. Frank L. Dunn, pres., treas.; Thomas L. Dunn, vice-pres.; Wilson A. Dunn, secy.

DUPLEX TRUCK CO., Lansing, Mich. Heavy-duty motor trucks. A. Langenbacher, pres., treas., sales mgr.; A. C. Pratt, H. F. Harper, vice-pres.; G. A. Schell, secy.; A. C. Pratt, gen. mgr.; B. F. Wright, engr.; G. A. Schell, pur. agt.

du PONT de NEMOURS, E. I. & CO., Inc., "Fabrikoid" Division, Fairfield, Conn. "Fabrikoid" pyroxylin coated and impregnated material for upholstery and trim, bindings, curtains, etc; "Cavalon" rubberized upholstery fabric; "Teal" cloth automobile curtain and top fabric; Super Everbright automobile topping material; weather-stripping sponge rubber for the automobile. E. M. Flaherty, div. mgr.; E. S. Nickerson, dir. of sales; M. N. Nickowitz, sales mgr.; P. W. Sampson, adv. mgr.; W. S. Lynch, pur. agt. **Det. Rep.**—T. A. Nalle, du Pont Co., 5-238 General Motors bldg.

DURA-PRODUCTS MFG. CO., 1411 Fifth st., S. W., Canton, O. Tire covers, reflector emblems, reflectors, signs. B. T. Steiner, chmn.; C. C. Steiner, pres.; E. E. George, vice-pres.; L. J. Bitter, sales mgr., adv. mgr.; Robert Paul, pur. agt. **Det. Rep.**—E. F. Siegfried, 1752 Brussels st., Toledo, O.

DURKEE-ATWOOD CO., 40 Wilder st., Minneapolis, Minn. Rubber mechanical and specialty goods (automotive), chemical products. A. F. Durkee, pres.; F. J. Hopkins, vice-pres.; H. C. Atwood, secy.-treas., gen. mgr.; E. C. Pierce, sales mgr.; E. P. Atwood, adv. mgr.; C. F. Walz, engr.; V. D. Atwood, pur. agt. **Adv. Agcy.** — Graves and Associates, Radisson Hotel, Minneapolis, Minn.

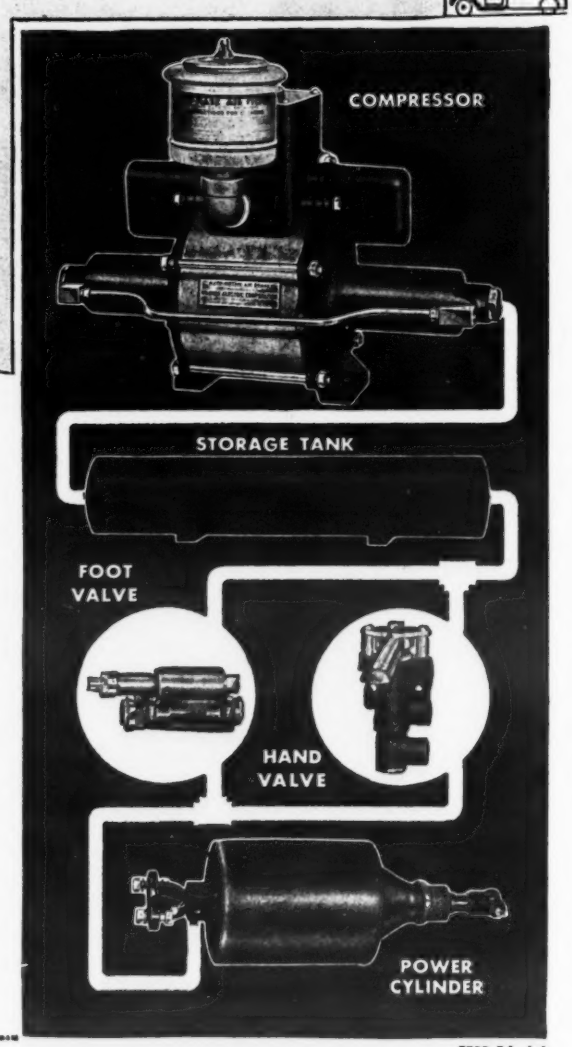
DURO-GLOSS RUBBER CO., 30 Lenox st., New Haven, Conn. Rubberized and
(Continued on Next Page)

NEW PROFITS for YOU!

with . . . Wagner AUTO-MOTIVE-AIR POWER BRAKES

A Perfected and Simplified *Air-Brake* System for

TRUCKS
TRACTORS
TRAILERS
BUSES



YOU Can Improve the BRAKING PERFORMANCE of Every Vehicle YOU SELL!

Here is one of the simplest devices ever developed for converting manual brakes into REAL Power Brakes—Power Brakes with plenty of stored power always ready when needed.

Wagner Auto-Motive-Air has all of the recognized advantages of the air brake principle, but due to its simplicity and greatly reduced number of parts, offers added advantages, such as:—Simple Field Installation . . . Low Installation and Maintenance Cost . . . Quick Action and Release . . . Automatic time interval between trailer and tractor brake application . . . Dual Valve Control, and many other benefits that contribute to driving safety and efficiency.

Thousands of truck operators have already installed Wagner Auto-Motive-Air on their rolling equipment, and this increasing popularity makes it an extra profit item that manufacturers and dealers should not overlook. Check and mail the coupon below today, for complete information.

Another WAGNER *contribution to driving* SAFETY and EFFICIENCY

NoRoL . . . positively one of the greatest automobile safety achievements of all time. Can be quickly installed on any Hydraulic Brake equipped car to prevent back-roll while stopping in traffic or on inclines. 100% automatic. It is another Wagner item that will give you added profit.

CHECK the coupon on the right, for complete information. No obligation.

K38-5A AA

AUTOMOTIVE EQUIPMENT DIVISION

Wagner Electric Corporation
6400 Plymouth Avenue, Saint Louis, U.S.A.

I am interested in receiving full information on the extra profit items checked.

☐ Wagner Auto-Motive-Air Power Brakes
☐ Wagner Automatic NoRoL

NAME . . . . . .
COMPANY . . . . . .
ADDRESS . . . . . .
CITY . . . . . STATE . . . . . .

Who's Who

(Continued from Previous Page)

pyroxylin coated fabrics and paper, rubber filing and plastics. H. E. H. Cox, pres.; J. H. Parker, secy.; H. E. H. Cox, gen. mgr.; J. C. Ramstedt, engr.; T. F. Coffey, pur. agt.

DURO METAL PRODUCTS CO., 2649 N. Kildare ave., Chicago, Ill. Wrenches, sockets, open end wrenches, box end wrenches, screw drivers, gear pullers, fender and body tools, electric drills. W. H. Odlum, pres.; N. F. McNaught, vice-pres.; W. R. Hosford, sales mgr.; L. J. Hansen, pur. agt. **Det. Rep.**—Harry G. Kitchin, 204 S. 16th st., Richmond, Ind.

E

EAGLE-PICHER SALES CO., Temple Bar bldg., Cincinnati, O. White, red and sublimed blue lead, flating oil, lead reducing oil, plastic insulation, zinc and lead pigments, bearing metals, solders. Joseph Hummel jr., pres., treas.; Frederick Hertenstein, vice-pres.; William R. Dice, exec. vice-pres.; Carl A. Geist, Thurman C. Carter, William H. Hayt, Miles M. Zoller, vice-pres.; Vincent H. Beckman, secy.; Heridon H. Bowen, asst. secy.; Carl A. Geist, asst. secy.and asst. treas.; E. L. Gouedy, adv. mgr.; R. E. McCormack, pur. agt. **Det. Rep.**—Eagle-Picher Sales Co., Room 406, 1627 W. Fort st. **Adv. Agcy.**—Needham, Louis & Brorby, Inc., 360 N. Michigan ave., Chicago, Ill.

E. A. LABORATORIES, Inc., 696 Myrtle ave., Brooklyn, N. Y. Electric horns, hand horns, hot water heaters, fans, defrosting equipment. John M. Aufiero, pres., gen. mgr., treas.; M. DeRosa, vice-pres., pur. agt.; E. J. Hauck, secy.; H. L. Carlson, sales mgr.; R. A. Picard, adv. mgr.; W. A. Toepel, elec. engr.; C. E. Meyerhoefer, mech. engr. **Det. Rep.**—Anthony Maiullo, 1980 National Bank bldg. **Adv. Agcy.**—Picard Advertising, Inc., 250 W. 57th st., New York, N. Y.
(See display advertising index)

EATON MFG. CO., 739 E. 140th st., Cleveland, O. Axles, bumpers, valves, valve lifters, leaf springs, coil springs, stampings, spring washers, car heaters, valve seat rings, castings. J. O. Eaton, chmn.; C. I. Ochs, pres.; F. A. Buchda, H. J. McGinn, R. H. Daisley, W. H. Wallace, W. H. Crawford, vice-pres.; H. C. Stuessy, secy.-treas.; Morgan Fenley, adv. mgr.; V. Cada, pur. agt. **Det. Rep.**—Detroit Offices, 9771 French rd. **Adv. Agcy.** — Meldrum & Fewsmith, Inc., Cleveland, O.
(See display advertising index)

EATON PRODUCTS, Inc., 739 E. 140th st., Cleveland, O. Replacement springs and axle shafts, car heaters, replacement gas tank caps. C. C. Bradford, pres.; Morgan Fenley, vice-pres.; F. J. Hessler, secy.-treas. **Adv. Agcy.** — Meldrum & Fewsmith, Inc., Cleveland, O.

EBERHARDT-DENVER CO., 1408 W. Colfax ave., Denver, Colo. Gears, sprockets, speed reducers, geared transmissions. Fred R. Eberhardt, sole owner.

EBERHARD MFG. CO., Div. of Eastern Malleable Iron Co., 2734 Tennyson rd., Cleveland, O. Truck, taxicab and bus body hardware, artillery spoke metal wheels, trailer axles, malleable iron castings. Arthur L. Wheeler, managing dir.; D. V. Walker, sales mgr.; C. R. Hennicke, adv. mgr., engr.; Wm. Taylor, pur. agt. **Det. Rep.**—W. A. Henderson, 18500 Cherrylawn ave. **Adv. Agcy.**—T. H. Ball & Associates, 850 Euclid ave., Cleveland, O.

ECLAT RUBBER CO., 2009 Oakwood dr., Cuyahoga Falls, O. Tubing, tubing machine products, radiator hose, heater hose. C. E. Reiss, pres., treas.; J. E. Smith, vice-pres., gen. mgr.; C. M. Wernig, vice-pres., sales mgr.; E. P. Hissem, secy.; W. M. Jones, pur. agt. **Det. Rep.**— W. E. Easler, 2-246 General Motors bldg.

ECLIPSE AIR BRUSH CO., Inc., 390 Park ave., Newark, N. J. Spray painting equipment, spray guns, compressors, hose. Howard W. Beach, pres.; Austin H. Downs, secy. **Det. Rep.**—J. G. Smith, 305 National bldg., Cleveland, O.

ECLIPSE MACHINE DIV., Bendix Aviation Corp., 18th st., Elmira, N. Y. Starter drives, startix, automatic starting switch, circuit controllers. W. L. McGrath, gen. mgr.; H. C. Bush, sales and adv. mgr.; M. P. Whitney, chief engr.; C. H. McPherson, pur. agt.; Fred Wurth, asst. pur. agt. **Det. Rep.** — Eclipse Machine Div., Bendix Aviation Corp., 8-205 General Motors bldg. **Adv. Agcy.**—Roche, Williams & Cunnyngham, 310 S. Michigan ave., Chicago, Ill.

EDDE MFG. CO., 102 E. Walnut st., Milwaukee, Wis. Door anti-rattlers, spark plug cleaner, radiator solders and cleaners, oil. E. J. Deguenther, chmn., pres., gen. mgr.

EDELMANN, E. & CO., 2332-56 Logan blvd., Chicago, Ill. Anti-freeze testers, battery testers and fillers, brass fittings, hub caps, hydraulic and vacuum brake parts, brake cables, fuel lines. Leo Edelmann, pres.; Robert Edelmann, vice-pres.; Bob Lacey, gen. mgr.; Karl Reifenburg, sales mgr.; Dave Pinchot, adv. mgr.; T. Tobin, engr.; H. J. Lutz, pur. agt. **Adv. Agcy.**—Richardson Oswald Co., Cleveland, O.

EDISON-SPLITDORF CORP., West Orange, N. J. Spark plugs, magnetos, ignition coils. C. S. Williams, pres.; A. J. Clark, vice-pres., gen. mgr., sales mgr.; Arthur Walsh, vice-pres.; H. H. Eckert, vice-pres., treas.; F. C. Erwin, secy.; W. H. Balentine, asst. secy.; S. Schaeffer, sales prom.; L. S. Dunham, A. F. Klingner, engrs.; G. W. McLaughan, pur. agt. **Adv. Agcy.**—Aitken Kynett Co., Philadelphia, Pa.

ELCAR COACH CO., Inc., W. Beardsley ave., Elkhart, Ind. House trailers and commercial trailers, shells, concession. H. A. Hill, chmn., sales mgr., adv. mgr.; G. J. Wilds, pres., gen. mgr.; Henry Rademacher, vice-pres.; E. F. Wilds, secy.-treas.; Geo. Dengler, engr.; K. A. Warren, pur. agt. **Det. Rep.** — Trailer Travel Co., 2941 E. Jefferson ave. **Adv. Agcy.**—Staley Advertising, Fort Wayne, Ind.

ELCO TOOL & SCREW CORP., 1800 Broadway, Rockford, Ill. Wood and machine screws, cold headed products. G. A. Peterson, pres.; P. G. Swanson, vice-pres. in chge. of sales; C. G. Englund, vice-pres. in chge. of prod.; H. O. Swanson, secy.-treas.; R. J. McNeany, adv. mgr.; E. P. Olson, pur. agt. **Det. Rep.**—F. G. Richardson, 541 New Center bldg., **Adv. Agcy.**—C. A. Corrigan, 825 N. Main st., Rockford, Ill.

ELECTRA MFG. CO., 2537 Madison st., Kansas City, Mo. Starter switches, generator cutouts, horns, battery cables and terminals, wire, ignition cable sets, voltage regulators. R. G. Lafite, pres.; F. R. Jones, gen. mgr.

ELECTRIC AUTO-LITE CO., Toledo, O. Starting, lighting and ignition systems. C. O. Miniger, chmn.; R. G. Martin, pres.; D. H. Kelly, exec. vice-pres.; J. H. McDuffee, vice-pres.; B. A. Fay, vice-pres. of prod.; L. H. Middleton, vice-pres. of engr.; W. V. Flood, compt.; J. H. Housholder, treas.; J. B. Fenner, asst treas.; F. J. Kennedy, asst. treas.-asst. secy.; F. H. Landwehr, secy.; E. H. Reed, dir. of purch.; F. A. Nealon, mgr. merch. div.; J. A. Shank, serv. div.; R. C. Held, sales order dept.; W. P. Loudon, sales engr.; C. W. Pound, plant mgr.; H. E. Hasemeyer, prod. mgr.
(See display advertising index)

ELECTRIC FURNACE CO., Wilson st., Salem, O. Oil and gas-fired and electrically heated industrial furnaces. R. F. Benzinger, pres., sales mgr.; C. L. West, vice-pres.; R. D. Painter, secy.; F. T. Cope, treas., gen. mgr.; A. E. Wright, adv. mgr.; A. H. Vaughan, engr.; R. M. Warren, pur. agt. **Det. Rep.**—B. C. Thompson, 8291 Wisner ave.

ELECTRIC HEAT CONTROL CO., 9123 Inman ave., Cleveland, O. Motor and ignition testers, distributor testers, exhaust gas analyzers, headlight meter, condenser, spark plug, coil-ignition, compression and vacuum-fuel pump, voltage regulator-generator and armature testers, arc welders, battery chargers, battery and cell testers, rectifying tubes. E. P. Maurer, chmn., pres., treas., gen. mgr., pur. agt.; G. LaGanke, vice-pres.; E. C. Mason, secy.; W. J. Bartlett, sales mgr.; G. J. Johnson, adv. mgr.; S. Vorisek, engr. **Det. Rep.**—Albert I. Snyder, 83 N. 34th st., Newark, O. **Adv. Agcy.** — G. J. Johnson, Fidelity bldg., Cleveland, O.

ELECTRIC VACUUM CLEANER CO., 1734 Ivanhoe rd., Cleveland, O. Vacuum cleaner. J. Tuteur, chmn., pres.; R. B. Wilson, J. Tuteur jr., vice-pres.; V. M. Cannon, treas.; W. F. Conley, adv. mgr. **Adv. Agcy.**—Lord & Thomas, New York, N. Y.

ELGIN MACHINE WORKS, Inc., 412 N. State, Elgin, Ill. Piston pins and replacement parts. Martin Skok, pres., treas., gen. mgr.; Frieda Burren, secy.; C. P. Brucker, asst. gen. mgr., pur. agt. **Det. Rep.**—T. J. Hix, Elgin, Ill.

EMPIRE SHEET & TIN PLATE CO., N. Bowman, st., Mansfield, O. Hot rolled and annealed sheets, single pickled sheets, Wabik enameling sheets, electrical sheets, long terne sheets, tin mill black sheets. Henry A. Roemer, chmn.; J. M. Hill, pres.; J. B. Montgomery jr., vice-pres., sales mgr.; J. B. Putnam, secy.; O. C. Henkel, treas.; W. H. Lake, gen. supt.; C. F. Beddard, adv. mgr.; Geo. R. Roemer, engr.; H. O. Simmons, pur. agt. **Det. Rep.**—L. D. Rockwell Co., 711 Book bldg.

EMPIRE STATE AUTOMOBILE MERCHANTS ASSN., Inc., 184 State st., Albany, N. Y. J. B. Rusterholtz, pres.; E. M. Alling, first vice-pres.; L. C. Bolles, second vice-pres.; Roy M. Sutliff, secy.; C. H. Touhey, treas.

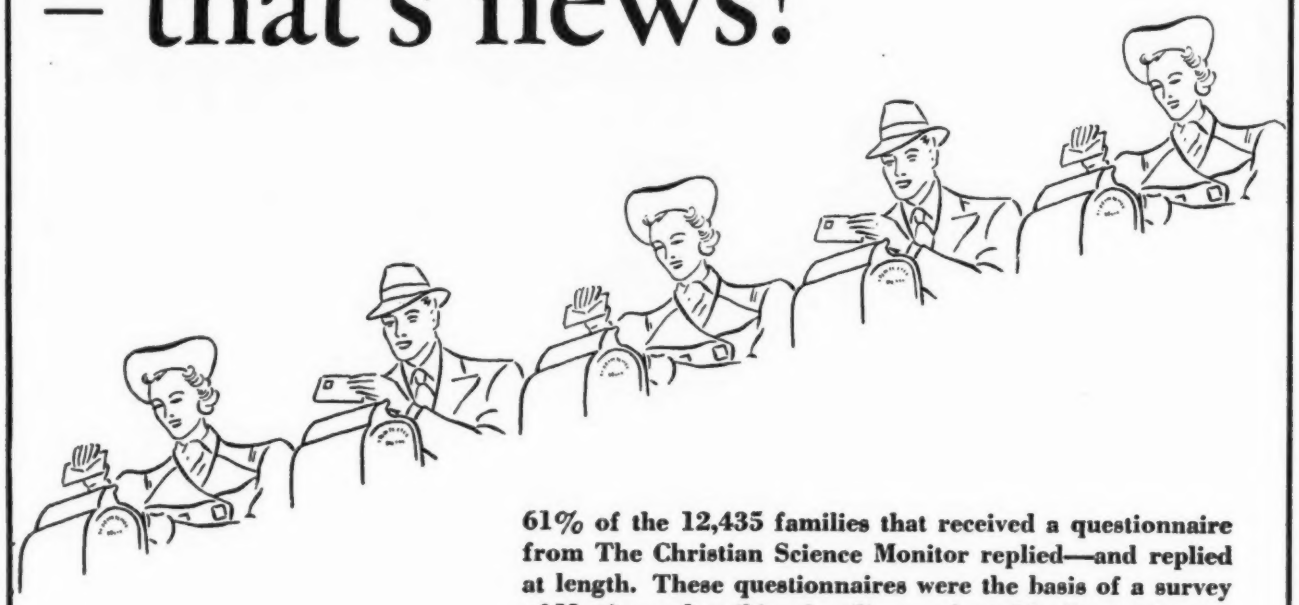
ENDICOTT FORGING & MFG. CO., Inc., 1900 N. st., Endicott, N. Y. Drop and upset forgings. T. B. Kelday, pres., gen. mgr.; Geo. H. W. Stone, vice-pres.; D. O. Freeman jr., secy.-treas.; A. W. Schaefer, sales mgr.; C. A. Murray, pur. agt. **Det. Rep.**—R. J. Scothorn, 6432 Cass ave.

ERA PRODUCTS CORP., Fayette, O. Metal stampings. E. L. McKimm, pres. **Det. Rep.**—A. L. Moses Co., 637 New Center bldg.

ERIE HOIST CO., 2022 Holland, Erie, Pa. Motor truck hand and power winches. Henry Hagenlocher, owner and mgr.

ERIE MALLEABLE IRON CO., 620 W. 12th st., Erie, Pa. Malleable castings, bus,
(Continued on Page 61)

When 61% reply – that's news!



61% of the 12,435 families that received a questionnaire from The Christian Science Monitor replied—and replied at length. These questionnaires were the basis of a survey of Monitor subscribing families conducted by Daniel Starch, Ph. D., Consultant in Commercial Research. Commenting upon the 61% response, Dr. Starch said: "This is an extremely high percentage of returns to be received from any mailed question sheet." This definite proof of reader responsiveness is something for advertisers to consider. It is based upon the active interest of Monitor readers in The Christian Science Monitor—its advertisements quite as much as its news and editorials. The Monitor stands for a unique type of journalism and Monitor readers support it in every phase of its activities.

Facts developed by the Dr. Starch survey are interestingly dealt with in a group of illustrated folders, one or all of which will gladly be supplied by any Advertising Office of the Monitor.

HIGHLIGHTS of the Survey

- 40.2% of the Heads of Monitor Families Have Executive or Professional Positions.
- 75.4% of Monitor Families Own Automobiles.
- 74.1% Have Subscribed to the Monitor for 5 or more years.
- 98.2% Use Electric Service
- 88.8% Have Telephones.
- 74.6% Have Automatic Refrigerators.

THE CHRISTIAN SCIENCE MONITOR

Published by The Christian Science Publishing Society, One, Norway Street, Boston, Massachusetts

DETROIT OFFICE: 3-101 General Motors Building

OTHER BRANCH OFFICES: New York, Chicago, St. Louis, Kansas City, San Francisco, Los Angeles, Seattle, Miami . . . London, Paris, Geneva

A DAILY NEWSPAPER FOR ALL THE FAMILY

Who's Who

(Continued from Page 60)

truck and trailer wheels, fittings, electric conduit fittings, brake drums. J. H. Redhead, exec. vice-pres., gen. mgr.; B. H. Scott, sales mgr.; P. H. Vincent, engr.

ERIE METER SYSTEMS, Inc., Pearl and Wagner aves., Erie, Pa. Gasoline dispensing pumps, visible pumps, lubricating oil, grease and kerosene handling equipment, air compressors, air stands, bulk and service station fittings. L. O. Carlson, pres.; N. A. Carlson, vice-pres.; L. F. Smith, secy.-treas.; H. S. Pell, sales mgr.; L. R. Olsen, engr.; J. E. Robison, pur. agt. **Det. Rep.** — Harold Souder, 2662 Tuxedo ave. **Adv. Agcy.**—Davies-McKinney & Jones, 522 Erie Trust bldg., Erie, Pa.

ERO MFG. CO., 714 W. Monroe st., Chicago, Ill. Fabric and metal automotive equipment. Howard F. Leopold, pres.; Hy Kaufman, vice-pres.; Harry M. Sears, secy.; C. Ted Baer, sales mgr.

ESMCO AUTO PRODUCTS CORP., Bush Terminal bldg., No. 7, Brooklyn, N. Y. Clutch plates and parts, water pump parts, spindle bolts and king pins, ball joint housings, etc. Jesse A. Gerstenfeld, vice-pres., gen. mgr., sales mgr.; Irving Prager, secy.-treas., pur. agt., Harold L. Walker, engr.

ETCHING CO. OF AMERICA, 1520 Montana st., Chicago, Ill. Etched metal name plates, scales, dials, panels, signs, etc. C. M. Owens, pres., gen. mgr.; William E. Langrill, vice-pres.; L. W. Owens, secy.-treas., adv. mgr.; Wm. F. Gohr, engr.; George Mamerow, pur. agt.

ETHYL GASOLINE CORP., 405 Lexington ave., New York, N. Y. Ethyl and "Q" brands of anti-knock compound. E. W. Webb, pres.; Thomas Midgley jr., Graham Edgar, vice-pres.; J. C. Taylor, vice-pres. in chge of sales; J. C. Gonzalez, secy.; J. C. Mehring, treas.; Harry W. Kaley, gen. sales mgr.; Paul E. McElroy, adv. mgr.; Earl Bartholomew, engr.; Elmer Chellborg, pur. agt. **Det. Rep.**—Julian J. Frey, 723 E. Milwaukee ave. **Adv. Agcy.**—Batten, Barton, Durstine & Osborn, 383 Madison ave., New York, N. Y.

(See display advertising index)

EVANS APPLIANCE CO., 15310 Fullerton, Detroit, Mich. Aircraft fuel pumps, automotive fuel pumps. E. S. Evans, pres.; E. S. Evans jr., vice-pres.; Prewitt Semmes, secy.; Edward J. Hill, chief engr. **Adv. Agcy.** — Grace & Bement, Inc., Detroit, Mich.

EVANS FLEXIBLE REAMER CORP., 3656 Lincoln ave., Chicago, Ill. Pin fitting and aligning machine, reamer drive, pin and piston vises, steel expansion reamers, pin gauge, reamer sharpening machine, valve seat reamers and pilots. W. H. Evans, pres.; A. Wideburg, vice-pres., engr., pur. agt.

EX-CELL-O CORP., 1200 Oakman blvd., Detroit, Mich. Facing machine, precision boring machines, thread grinders, tool grinders, special machines, cutting tools, bushings. Phil Huber, pres., gen. mgr.; H. Glenn Bisby, secy.-treas.; Thor Olson, sales mgr.; Tom Maule, adv. mgr.; Fred Sicklesteel, pur. agt.

EXCELSIOR STOVE & MFG. CO., Quincy, Ill. Stoves, ranges and furnaces, combination ranges of coal, gas and electric. John J. Fisher, pres., treas.; W. J. Fisher, vice-pres.; F. A. Damhorst, secy.; T. F. Ehrhart, adv. mgr.

F

FABER - SCHNEIDER RADIATOR CO., 2217-19 S. Wabash ave., Chicago, Ill. Radiators, gas tanks, coils. U. S. DeMoulin, pres.; G. C. Steffey, vice-pres., secy.-treas.

F. A. B. MFG. CO., Inc., 67th and Vallejo sts., Oakland, Calif. Six-wheel units, dual drive units, extension frames, semi trailers, trailers, logging dollies, hoists and dump bodies. K. Freitag, pres.; R. B. Hale, vice-pres.; H. D. Ainsworth, secy.-treas.; V. A. Stout, sales mgr. **Adv. Agcy.**—O. E. Hopfer, Oakland, Calif.

FAFNIR BEARING CO., Booth st., New Britain, Conn. Ball bearings, roller bearings, ball bearing transmission units. E. H. Cooper, chmn.; Maurice Stanley, pres.; C. F. Stanley, vice-pres., sales; E. R. Carter, vice-pres., engr.; R. R. Searles, vice-pres., prod., gen. mgr.; S. M. Cooper, secy.; A. L. Way, treas.; C. E. Stanley, sales mgr.; D. M. Davidson, adv. mgr.; H. R. Reynolds, engr.; H. P. Knowles, pur. agt. **Det. Rep.**—F. Leister, 502 New Center bldg. **Adv. Agcy.**—Larchar Horton Co., Industrial Trust bldg., Providence, R. I.

FAIRFIELD MFG. CO., Wallace ave. and Belt R.R., Lafayette, Ind. Hypoid, spiral bevel, straight bevel, spur, helical spur and worm gears; shafts and differentials. A. J. McAllister, pres.; A. A. Gustafson, vice-pres.; Rochester Baird, vice-pres., secy.; E. M. Heinmiller, treas.; G. S. Swanson, supt.; D. W. Owens, sales engr.; F. H. Boor, chief engr.; W. C. Nichelson, pur. agt.; R. C. Steiner, prod. mgr.

FAIRMOUNT TOOL & FORGING CO., 10611 Quincy ave., Cleveland, O. Machinist hammers, chisels, punches, screw drivers, body and fender repair tools, greasing service tools, tire repair tools, tool kits, drop forgings. J. Wentworth Smith, pres.; Jas. A. Farrell, vice-pres.; B. G. Gilmore, secy.-treas., sales mgr.; L. A. Anthony, gen. mgr.; J. C. Homans, adv. mgr.; A. Pritchard, engr.; A. P. Kramer, pur. agt.

FALLS SPRING AND WIRE CO., 8635 Conant rd., Detroit, Mich. Cushion springs, mechanical springs. Wm. A. Falls, chmn., pres., gen. mgr., sales mgr.; L. H. Heuer, D. H. VanHove, vice-pres.; Harry Swanson, secy.-treas.; Charles H. Forrest, pur. agt.

FARGO MOTOR CORP., Div. of Chrysler Corp., 7900 Joseph Campau ave., Detroit, Mich. Fleet sales of Dodge and Plymouth comml. cars, trucks, taxicabs and Chrysler, De Soto, Dodge and Plymouth passenger cars. R. L. Biggers, pres.; A. H. Ferrandou, J. H. Mack, D. W. Russell, Lester L. Colbert, vice-pres.; H. A. Davies, treas.; R. P. Fohey, secy.

FARREL - BIRMINGHAM CO., Inc., 25 Main st., Ansonia, Conn. (Also 344 Vulcan st., Buffalo, N. Y.). Gears, gear units, speed reducers, speed increasing units, gear generating machines, gear tooth comparator, cold roll metal forming mills, hydraulic metal forming presses, plastic molding presses, roll grinding machines, heavy machinery for various purposes. Franklin Farrel jr., chmn.; N. W. Pickering (Ansonia), pres., gen. mgr.; Carl Hitchcock (Ansonia), vice-pres., sales mgr.; A. S. Redway, vice-pres.; A. G. Kessler (Buffalo), vice-pres., sales mgr.; Geo. C. Bryant, secy.; F. M. Drew jr., treas.; Austin Kuhns (Buffalo) sales mgr.; T. V. Busk, adv. mgr.; R. A. North (Ansonia), Paul Manger (Buffalo), engrs.; C. E. Burton, pur. agt. **Det. Rep.** — Sterling-French Machinery Co., New Center bldg. **Adv. Agcy.** — Eddy-Rucker-Nickels Co., 1400 Massachusetts ave., Cambridge, Mass.

FATSCO, 251-257 N. Fair ave., Benton Harbor, Mich. Camp and trailer stoves, jobbers of Coleman and Turner stoves, lanterns, Rutland products, etc. C. E. Brown, pres., gen. mgr., sales mgr., adv. mgr., pur. agt.; Martha Nimtz, secy.; O. Burtzlaff, engr.

FEATHEREDGE RUBBER CO., Inc., 340 W. Huron st., Chicago, Ill. Sponge rubber, weatherstrips, gaskets, arm rests, seals. B. B. Felix, pres., treas.; H. M. Hood, vice-pres., sales mgr.; I. H. Felix, secy. **Det. Rep.**—J. D. Chamberlin, 3-214 General Motors bldg.

FEDDERS MFG. CO., Inc., 57 Tonawanda st., Buffalo, N. Y. Radiators, unit heaters, car heater cores, air conditioning lowsides, unit coolers, refrigeration parts and accessories, coils, valves, condensers, evaporators, etc. L. F. Fedders, pres., treas.; T. C. Fedders, vice-pres., gen. mgr.; C. W. Fedders, H. E. Rieckelman, vice-pres.; W. E. Detenbeck, secy.; A. F. Ihde, sales mgr., engr.; H. A. Laney, adv. mgr.; J. M. Heimerl, pur. agt.; H. E. Rieckelman, in chge of sales. **Det. Rep.**—C. H. Batchelor, 2207 Fisher bldg. **Adv. Agcy.**—Horace A. Laney, 374 Delaware ave., Buffalo, N. Y.

FEDERAL BEARINGS CO., Inc., Fairview ave., Poughkeepsie, N. Y. Ball bearings. H. A. Schatz, pres.; Geo. R. Bennett, secy.; H. F. Petersen, sales mgr.; C. Naylor, engr.; V. W. Fichtel, pur. agt. **Det. Rep.** — Fred Glass, 2608 Book Tower.

FEDERAL MACHINE & WELDER CO., 212 Dana st., Warren, O. All types of electrical resistance welders. F. P. McBerty, chmn.; M. S. Clark, pres., gen. mgr.; H. C. Milligan, Paul Buckley, Ross W. Judson, vice-pres.; O. E. Erk, secy.-treas.; F. A. Hurcomb, asst. gen. mgr.; T. Embury Jones, sales mgr., adv. mgr.; E. W. Forkner, engr.; O. L. Jacobs, pur. agt. **Det. Rep.**—A. B. Sonneborn, 710 Fisher bldg. **Adv. Agcy.** — Meek & Wearstler, Youngstown, O.

FEDERAL METALLIC PACKING CO., 29-99 Foundry st., Wakefield, Mass. Water pump packing rings and coils, mechanical sealing units, pump bushings, radiator solder, sealer and cleaner, glass and windshield cleaner, industrial packings. Malcolm Green, pres.; R. H. Osborn, vice-pres., gen. mgr., sales mgr., engr.; Fred D. King, secy.-treas., pur. agt. **Det. Rep.**—Burton-Rogers Co., 857 Boylston st., Boston, Mass.

FEDERAL INDUSTRIES, 113 3rd ave., N., Minneapolis, Minn. Utility trailers, industrial carts and chassis. Joseph A. Ditter, prop., pres.; Francis J. Ditter, gen. mgr., engr., pur. agt.; Arthur A. Bursch, sales and adv. mgr.; E. L. Soland, prod. mgr.

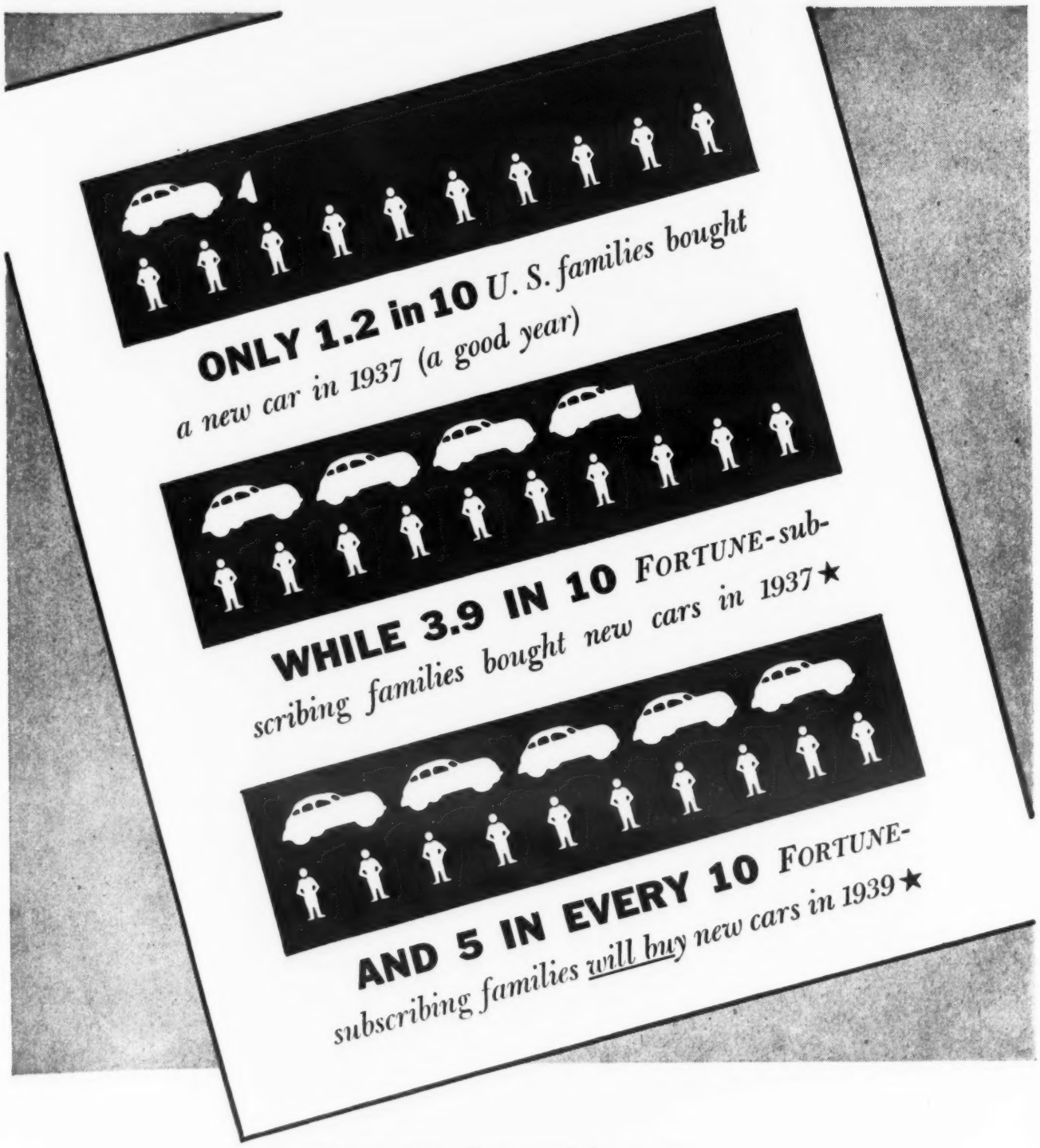
FEDERAL - MOGUL CORP., Shoemaker and Lillibridge sts., Detroit, Mich. Bronze back babbitt-lined bearings, steel back babbitt-lined bearings, die cast babbit bearings and bushings, bronze bushings and bronze washers, bronze castings, bronze cored and solid bars, babbitt metals, thermo, flow power heads. H. Z. Muzzy, pres.; S. C. Reynolds, vice-pres., treas.; D. W. Rodger, vice-pres., sec., dir. of sales; E. R. Darby, chief metallurgist; G. S. Peppiatt, comptr.; E. O. Jones, sales mgr., orignl. equip. div.; F. Kellison, sales mgr., replacement div.; T. F. W. Meyer, sales mgr., marine div.; A. B. Willi, chief engr.; M. A. Hunter, pur. agt. **Adv. Agcy.**—F. M. Randall Co., 3314 Book Tower, Detroit, Mich.

FEDERAL MOTOR TRUCK CO., 5780 Federal ave., Detroit, Mich. Motor trucks, cabs and bodies. R. W. Ruddon, pres., gen. mgr.; F. L. Ruddon, fcty. mgr.; S. G. Mitchell, adv. mgr.; M. L. Burrell, pur. agt.; J. T. Ott, sales prom. mgr.; O. E. Johnson, orgn. and analysis mgr.; C. A. Rogers, secy.-treas.; K. M. Schaefer, gen. sales mgr.; R. B. Nettleton, asst. sales mgr. eastern territory; Roy Evans, asst. sales mgr. western territory; E. W. Winans, chief engr.; S. Fitzpatrick, export mgr.; W. C. Mackenzie, sales engr.; J. F. Maxwell, serv. mgr. **Adv. Agcy.**—Grace & Bement, Inc., New Center bldg., Detroit, Mich.

FEDERAL PRODUCTS CO., 113 3rd ave., N., Minneapolis, Minn. One-wheel utility trailers, three-wheel power scooters, filling station signals. Francis J. Ditter, Arthur A. Bursch, partners; Arthur A. Bursch, sales mgr., adv. mgr.

FELLOWS GEAR SHAPER CO., 78 River, Springfield, Vt. Enveloping gear generators, worm-type thread generators, hourglass gear shapers, gear tooth burnishing and lapping machines, worm lapping machines, helical cutter and hob sharpening machines, gear and worm

(Continued on Page 63)



★First facts discovered in a comprehensive survey made among FORTUNE subscribers June, 1938.

Fortune Means Business

TIME & LIFE BUILDING • ROCKEFELLER CENTER • NEW YORK CITY

New Commercial Car Registrations, 12 Months Total, 1937-1936

Figures supplied by R. L. Polk & Co., New Jersey Motor List Co., and for New York City area by Sherlock & Arnold.

STATES		Autocar	Brockway	Chevrolet	Diamond-T	Dodge	Federal	Ford	G.M.C.	Indiana	International	Mack	Plymouth	Reo	Sterling	Stewart	Studebaker	Terraplane	White	Willys	Miscellaneous	TOTAL
Alabama	'37			4589	3	1100	3	4718	594	13	1547	13	133	2			18	40	82	14	5	12874
	'36		1	5726	8	1219	8	4262	277	17	1479	10	26	11			8	14	77	29	15	13187
Arizona	'37	3	1	1346	12	403		835	340	1	403	18	110	21	5		45	51	31	10	24	3659
	'36			1248	19	692		845	100		449	1	15	37	1		25	30	19	23	6	3510
Arkansas	'37			3498	78	724	2	4539	786		852	5	240	36			29	32	10	2	3	10836
	'36			3790	47	992	5	3374	243	6	919	1	27	33			3	25	12	7	1	9485
California	'37	150	26	10134	278	5160	130	9704	3624	68	3551	326	860	350	120	63	735	462	379	411	370	36901
	'36	78	7	9056	283	6338	141	9243	2493	126	3312	195	133	273	103	31	310	136	355	692	351	33656
Colorado	'37	3		2347	186	939	15	2546	684	2	1081	34	211	106	2	2	66	101	37	2	47	8411
	'36			2921	203	1418	33	2672	389	13	1125	5	25	64			23	66	35	20	48	9060
Connecticut	'37	42	42	2032	121	759	75	2108	596	32	1025	213	208	131	10	25	51	54	160	1	82	7767
	'36	52	52	2286	140	1036	110	2249	463	35	1082	232	65	129	9	37	31	29	132	20	51	8240
Delaware	'37	23		790	3	114		507	162	2	191	13	33	3		3	9	11	6		12	1882
	'36	13	3	795	5	127		446	117	2	160	5	10	11		5	14	2	7	1		1723
Florida	'37	1		2887	78	987	41	4068	582	11	1304	93	263	134			36	76	66	75	20	10722
	'36			2974	48	1206	39	3116	284	12	1205	39	22	143			15	20	73	204	12	9412
Georgia	'37	2		4063	47	1217	30	5311	709	18	1194	60	148	8			47	50	66	13	15	12998
	'36			4712	93	1265	35	4748	439	34	1330	41	18	47			20	14	75	66	4	12941
Idaho	'37			1362	67	370	5	1260	298	1	677	11	94	20			133	98	21	9	28	4454
	'36			1684	55	658	2	1435	251	9	676	4	8	25			32	50	12	26	12	4939
Illinois	'37	63	2	8218	915	3475	247	8519	1933	37	4791	285	645	269	10	32	185	156	347	29	293	30451
	'36	36		9754	958	4511	250	8410	1141	121	4317	148	119	204	11	35	271	81	337	37	332	31123
Indiana	'37	17	3	4765	285	2298	72	5043	1380	54	2799	84	476	137	1	61	296	167	178	54	99	18269
	'36	8		6101	349	3271	86	5355	892	67	2696	83	119	149		96	236	77	191	129	122	20027
Iowa	'37	2		3913	237	1100	26	3780	479	5	2205	27	283	90			126	124	10	13	29	12449
	'36			4793	292	1540	21	3635	349	6	1990	38	74	82		2	52	52	13	26	34	12999
Kansas	'37	4		4017	244	859	14	3755	977	2	1783	11	288	78			106	186	28	7	50	12409
	'36	1	1	4438	243	1312	15	3165	452	7	1447	16	68	39			30	58	50	6	58	11406
Kentucky	'37	5		3370	112	1221	69	3328	1106	35	1630	57	273	87		11	118	56	68	16	35	11597
	'36			3782	144	1582	39	2668	593	22	1615	51	40	107		11	40	39	87	25	25	10870
Louisiana	'37			3100	87	681	6	3946	409	13	1540	25	150	35			26	21	42	22	8	10111
	'36			3644	101	988		3166	214	4	1389	22	35	44		3	1	4	39	65	34	9753
Maine	'37	6	9	1904	16	431	8	2157	339	1	463	41	96	22	4	3	64	58	22	1	13	5658
	'36	5	17	2038	16	649	4	1784	253	3	379	32	19	56		1	24	11	33	1	12	5337
Maryland	'37	75	58	2556	92	965	29	2033	473	31	843	118	149	19	5	30	38	65	124	5	55	7763
	'36	57	55	2496	124	1114	25	1794	401	21	859	89	41	49	4	12	42	11	147	3	38	7382
Massachusetts	'37	234	140	4029	225	1765	121	5371	1289	44	1372	277	306	215	49	82	74	222	291	4	125	16235
	'36	200	126	4131	210	2240	105	5052	952	40	1238	220	43	219	42	57	100	31	237	3	104	15350
Michigan	'37	12	1	6631	169	3078	264	8749	2016	5	1927	66	441	327		3	139	395	90	14	222	24549
	'36	11		7419	163	4007	303	8891	1414	10	1575	54	78	337		3	104	124	147	43	157	24840
Minnesota	'37	13		3995	255	1183	61	4338	669	16	2109	46	311	72		11	125	128	76	6	141	13555
	'36	1		4720	327	1732	76	4284	544	19	1788	50	86	103		14	83	49	116	9	143	14144
Mississippi	'37			3918	23	670	3	4357	508		1431	6	185	9			20	16	16	7	7	11176
	'36			4660	22	888		3019	188	9	1503		12	17			2	17	13	15	2	10367
Missouri	'37	14		6889	284	1635	85	5424	1457	23	2457	73	347	78		6	88	48	162	8	92	19170
	'36	16		8518	313	2216	108	5420	873	34	2047	104	76	59	2	5	78	33	143	12	85	20142
Montana	'37			1512	112	371	21	1490	290	6	917	2	103	10			93	63	32	1	21	5044
	'36			1895	133	769	30	1751	146	5	981	1	23	38		1	26	83	33	6	9	5930
Nebraska	'37			1877	109	433	9	2019	367	1	1112	38	107	21			32	46	11	1	19	6202
	'36			2497	151	741	7	2021	285		1129	40	31	31			9	29	16	8	1	6996
Nevada	'37			366	36	108		310	108	1	118	5	31	5	2		34	16	8		19	1167
	'36	2		375	11	180		394	61	3	132	5	3	9			6	5	3	6	15	1210
New Hampshire	'37	10	4	975	10	355	3	1084	153	3	229	33	45	24		14	29	19	10	2	20	3022
	'36	11	6	998	13	464	27	1051	137	20	278	41	10	57		24	21	9	18	9	2	3196
New Jersey	'37	244	170	4865	501	2153	103	5002	1216	117	2024	480	602	120	11	61	124	126	336		191	18446
	'36	158	176	4548	390	2632	168	4773	819	89	1848	365	2	115	15	62	145	60	349	1	220	16935
New Mexico	'37			1705	60	398	2	1444	484	2	636	29	201	15			24	38	45		6	5089
	'36			1915	58	426		1253	153	5	621	1	12	23			2	38	16	17	5	4545
New York	'37	498	772	10400	961	4710	197	10580	3946	377	4665	1300	821	296	30	421	296	176	940	20	516	41922
	'36	307	865	9895	1025	5880	197	10676	2224	269	4287	931	140	326	27	509	294	6	780	36	485	39159
North Carolina	'37	20		5354	50	1400	21	5304	776	32	1925	112	383	62			22	76	88	8	58	15691
	'36	14		5789	104	2017	16	4110	452	31	1357	109	44	39			10	24	100	10	60	14286
North Dakota	'37			969	32	271	1	928	99		744	1	63	10			22	39	1		13	3193
	'36			896	18	263		795	88	9	532		27	11			13	13	1	6	8	2680
Ohio	'37	125	1	8000	312	3766	119	8095	2020	135	3364	246	573	243	2	55	249	307	575	104	149	28440
	'36	117		8827	412	5167	127	8426	1196	165	3643	238	84	282	3	54	260	60	512	204	251	30028
Oklahoma	'37	7		5120	81	1109	33	4891	943	3	1942	31	242	26			58	70	63	17	66	14702
	'36	3		5883	89	1532	30	4613	413	27	1810	40	17	64			8	35	61	63	49	14737
Oregon	'37	1		2408	49	798	85	2268	676	13	856	66	181	56			122	127	73	43	37	7859
	'36			2604	70	1301	120	2270	438	18	794	44	28	57	1		33	70	39	122	41	8050
Pennsylvania	'37	471	315	9944	755	5346	121	9626	2973	106	5182	668	1226	466	37	222	487	123	616	32	434	39150
	'36	268	311	11381	869	6949	331	10527	2344	191	5535	575	369	376	38	288	499	76	754	56	182	41919
Rhode Island	'37	40	4	677	56	288	24	1016	237	1	177	46	73	19	7	2	20	19	33		10	2749
	'36	11	5	673	32	401	40	820	243	2	176	35	14	57	5	1	24	7	45		3	2594
South Carolina	'37	1		2539	15	748	11	2531	363	21	631	59	175	11			23	55	49	4	21	7257
	'36	2		2596	13	765	3	1804	159	25	564	20	20	13			9	22	32	21	23	6091
South Dakota	'37			715	42	268	1	812	134		514	11	53	40			27	23	2	1	16	2659
	'36			1000	32	407	3	847	87	4	477	3	18	37			8	18	6	1	14	2962
Tennessee	'37			3342	82	1172	90	3367	798	8	1481	12	231	35			48	31	79	10	13	10799
	'36			3758	110	1742	166	2848	432	11	1693	16	34	20			56	18	84	61	13	11062
Texas	'37	1		13463	305	3138	30	14449	2042	74	5382	160	830	82		1	314	276	223	57	78	40905
	'36	3		15757	281	3845	42	12051	909	104	5088	84	85	89			34	152	193	122	64	38903
Utah	'37			935	30	352	4	925	301	2	543	21	72	1	1		59	15	24	11	2	3298
	'36			1150	20	588	10	1076	188	1	447	14	1	14			17	19	7	18	1	3571
Vermont	'37	2	11	595	27	288	5	902	193	7	264	11	56	19		5	15	17	22		5	2444
	'36	4	29	693	29	317	4	768	157		226	13	5	19		6	8	13	7	5	5	2308
Virginia	'37	59	17	4890	32	1108	23	4390	820	3	1102	43	206	30		3	36	58	63	4	41	12928
	'36	30	12	5580	58	1538	21	3842	535	8	1003	36	33	39		4	34	12	70	20	29	12904
Washington	'37			2869	85	1148	21	2596	905	19	1554	89	183	79		5	161	231	96	60	121	10222
	'36			3315	87	1677	27	3043	614	47	1263	87	48	52			82	64	57	139	64	10666
West Virginia	'37	4		3119	117	999	37	2494	683	1	990	33	384	138		1	79	66	83	3	38	9269
	'36	4	9	3303	134	1506	68	2331	461	12	1048	18	59	91		1	32	21	48	27	8	9181
*Wisconsin	'37	10		5081	381	1635	41	4886	1088	14	1928	70	543	169	15	21	132	163	83	11	141	16412
	'36	20		5549	390	2326	56	4526	804	21	1806	43	98	105	16	11	74	61	113	11	207	16237
Wyoming	'37	1		748	45	273	16	768	162	3	433	20	46	18			39	15	31	1	8	2627
	'36			951	37	382	12	767	59	1	392	1	1	17			9	12	11	6	3	2661
Dist. of Colum.	'37	18	17	853	16	329	15	803	335	8	286	25	29	10		5	10	11	35	9	43	2857
	'36	19	20	830	21	479	20	828	254	20	248	26	5	8		7	22	5	52	4	72	2940
*12 Months Total	'37	2181	1593	183674	8118	64098	2339	189376	43522	1371	76174	5513	13709	4251	311	1148	5129	4823	5933	1122	3861	618249
	'36	1451	1695	204344	8750	85295	2930	177244	26980	1705	71958	4220	2420	4227	277	1280	3279	1905	5757	2441	3480	611644

*Wisconsin estimated for July-December, 1937.

Who's Who

(Continued from Page 61)

checking and measuring machines, gear shaper cutters, master and burnishing gears, gear tooth laps. E. R. Fellows, pres., gen. mgr.; W. D. Woolson, vice-pres.; E. J. Fullam, secy.-treas.; W. F. Slomer, sales mgr.; D. T. Hamilton, adv. mgr.; E. W. Miller, engr.; R. M. Fellows pur. agt. **Det. Rep.**—Fellows Gear Shaper Co., 616 Fisher bldg. **Adv. Agcy.**—Moser & Cotins, Inc., Graybar bldg., New York City.

FELT PRODUCTS MFG. CO., 1504-14 Carroll ave., Chicago, Ill. Non-metallic gaskets, cylinder head and manifold gaskets, grease retainers, pump packing, head and manifold gaskets. A. Mecklenburger, pres., gen. mgr.; H. Herz, vice-pres.; Frank R. Campbell jr., sales mgr., adv. mgr.; M. Cody, engr. **Det. Rep.** — W. M. Rosborough, 704 Stephenson bldg. **Adv. Agcy.** — Van Auken-Ragland, Inc., 20 N. Wacker dr., Chicago, Ill.

FERODO AND ASBESTOS, Inc., Codwise ave., New Brunswick, N. J. Brake linings, blocks and clutch facings. E. Muehleck, pres.; A. C. Teetsel, vice-pres., gen. mgr.; W. C. Dodge jr., secy.-treas. **Det. Rep.**—W. M. Lipps, 5-266 General Motors bldg. **Adv. Agcy.**—Geare-Marston, Inc., Philadelphia, Pa.

FERRO MACHINE & FDY. CO., 3155 E. 66th st., Cleveland, O. Grey iron castings, cylinders, cylinder heads, brake drums, housings, manifolds, flywheels and miscellaneous castings. Crispin Oglebay, chmn.; J. F. Leitch, pres., gen. mgr.; John M. Price, vice-pres., sales mgr.; R. H. Weir, vice-pres., secy.; N. J. Gauthier, treas.; S. J. Ruddock, pur. agt. **Det. Rep.**—A. Y. Linkner, General Motors bldg.

FERRO STAMPING & MFG. CO., 1367-1397 Franklin st., Detroit, Mich. Door locks, window regulators, door dovetails, outside door handles, windshield regulators, interior hardware. W. C. Devereaux, pres., gen. mgr.; R. W. Detwiler, J. A. Bryant, vice-pres.; W. A. Detwiler, secy.-treas.; D. E. Allen, asst. treas.; Bert Morley, sales mgr.; R. D. Hurst, engr.; M. G. Kennedy, pur. agt.

FINKL, A. & SONS CO., 2011 N. Southport ave., Chicago, Ill. Die blocks, hot work steels, hammer rams, piston rods and miscellaneous forgings. Elizabeth Finkl, chmn.; Fred Finkl, William Finkl, vice-pres.; Frank X. Finkl, secy.; A. R. Lane, gen. mgr.; J. C. Vance, sales mgr.; J. B. Reistad, engr.; C. A. Moorman, pur. agt. **Det. Rep.**—E. H. Graham, 2338 Book bldg.

FIRESTONE STEEL PRODUCTS CO., Firestone Park, Akron, O. Rims, parts and accessories, wheels, felloe bands, metal stampings, rolled and welded motor frame bands. Wm. A. Baker, pres.; H. W. Hooper, asst. treas.; C. C. Soper, engr.; W. S. Brink, dev. engr. **Det. Rep.** —E. M. Clissold, 1405 Henry st. **Adv. Agcy.**—Sweeney & James, Cleveland, O.

FIRESTONE TIRE & RUBBER CO., Firestone Park, Akron, O. Tires and tubes, steel rims, wheels, automotive stampings, spark plugs, brake lining, vibration dampeners, engine supports, rubber-to-metal items and latex whip sponge rubber cushioning. John W. Thomas, pres., gen. mgr.; Harvey S. Firestone jr., vice-pres.; L. R. Jackson, vice-pres., sales mgr.; S. G. Carkhuff, secy.; J. J. Shea, treas.; F. K. Starbird, adv. mgr.; W. T. Lewis, pur. agt. **Det. Rep.**—H. M. Taylor, cor. Vernor and Trumbull. **Adv. Agcy.**—Sweeney and James, Cleveland, O.

FIRTH-STERLING STEEL CO., McKeesport, Pa. Tool steels, stainless steels, sintered carbide tools and dies. Thos. D. McCloskey, chmn.; L. Gerald Firth, pres., gen. mgr.; D. G. Clark, vice-pres.; C. G. Krapf, secy.; D. E. Jackman, treas.; A. B. Corbin, sales mgr.; R. T. Riffle, adv. mgr.; William Schultz, engr.; Herman R. Huemme, pur. agt. **Det. Rep.** —Gunther A. Jacobs, 8330 W. Chicago blvd.

FISHER BODY DIV., General Motors Corp., General Motors bldg., Detroit, Mich. Automobile bodies. E. F. Fisher, gen. mgr.; W. S. McLean, adv. mgr.; P. J. Mauck, engr.; C. A. Crusoe, pur. agt. **Adv. Agcy.**—A. Kudner, New York, N. Y.

FISK RUBBER CORP., 154 Grove st., Chicopee Falls, Mass. Pneumatic automobile tires and tubes, sundry rubber goods and accessories. C. E. Speaks, pres., gen. mgr., sales mgr.; G. E. Whitelam, vice-pres.; K. R. Vogel, secy.; R. C. Guy, treas.; R. D. Patch, comptr.; H. R. Hurd, adv. mgr.; C. E. Maynard, fcty. mgr.; C. J. Allen, pur. agt. **Det. Rep.**—J. G. Cusick, 6209 Hamilton ave. **Adv. Agcy.**—Critchfield & Co., 720 N. Michigan ave., Chicago, Ill.

FITZGERALD MFG. CO., Torrington, Conn. Gaskets of all types and materials. P. J. Fitzgerald, pres.; M. D. Fitzgerald, vice-pres.; B. G. Peck, secy., sales mgr., adv. mgr.; M. F. Fitzgerald, treas.

FITZJOHN BODY CO., Muskegon, Mich. Bus bodies and complete buses. F. W. Feeney, pres.; Thomas H. Hume, vice-pres., treas.; A. M. Port, secy.

FITZSIMONS MFG. CO., 3104 E. Woodbridge st., Detroit, Mich. Former tubular parts from brass, copper, welded or seamless steel tubing, tubular assemblies, stampings and stamped assemblies, hydrogen furnace brazing and all types of welding. S. J. Fitzsimons jr., pres., gen. mgr.; H. B. Howenstein, vice-pres., treas.; J. W. Fitzsimons, secy.; L. J. Kroha, sales engr.; J. C. Richards, pur. agt.

FLASH LABORATORIES, 1858 W. Kinzie st., Chicago, Ill. Gasket shellac and dope, enamels, patch kits, glass kleener, valve grinding compound, radiator cements, penetrating oil, tape. J. M. Bell, pres.; Chas. J. Bell, vice-pres., gen. mgr., adv. mgr.; M. Belsky, secy.-treas.; B. G. Golden, sales mgr.; Geo. E. Kugelman, pur. agt. **Det. Rep.**—B. G. Golden, 10 Louise ave. **Adv. Agcy.**—McCord Agcy., Minneapolis, Minn.

FLEET SALES DIV., General Motor Sales Corp., 8-222 General Motors bldg., Detroit, Mich. Sale of G.M. cars and trucks to fleet users. C. E. Dawson, gen. mgr.; W. L. Shaffner, sales mgr.; F. V. Bott, svc. mgr. **Det. Rep.** — J. A. McLane, 8-222 General Motors bldg.

FLEMING MFG. CO., Rumford Postoffice, East Providence, R. I. Fram oil and motor cleaners, Fleming precision tools. Frederick H. Franklin, chmn.; Steven B. Wilson, pres., gen. mgr., sales mgr.; Charles H. Eden, vice-pres.; T. Edward Aldham, secy., pur. agt.; James E. Bigwood, treas.; Howard R. Robinson, adv. mgr.; J. William Wilkinson, engr.; **Det. Rep.**—Roy C. Noll, Hotel Webster Hall.

FLEX-O-TUBE CO., 750 14th st., Detroit, Mich. Flexible fuel lines, hydraulic oil control tubings, hydraulic brake hose assemblies. J. L. Ward, pres.; R. DeTamble, vice-pres.; J. H. Conn, secy.-treas.; Norman Couty, engr.; Anthony Wyka, pur. agt.

FLINTKOTE CO., 50 W. 50th st., New York, N. Y. Automotive felts, rubber cements, asphalt adhesives, anti-squeak compounds, crack sealers, mastic products, spray-on deadeners, body protective coatings. I. J. Harvey jr., pres.; F. H. Neher, vice-pres., sales mgr.; L. Kirschbraun, vice-pres., mgr. gen. research; G. P. Heppes, vice-pres., mfg. mgr.; G. K. McKenzie, secy.; C. W. Gregg, treas.; J. Miscall, mgr. rubber div.; E. O. Groskopf, mgr. asphalt emulsion div.; L. Rohe Walter, adv. mgr.; A. R. Campbell, pur. agt. **Det. Rep.**—Houston Boyet, H. C. Anderson, V. J. Hardig, 14201 Schaefer highway.

FLOWER CITY SPECIALTY CO., 158 Hollenbeck st., Rochester, N. Y. Monkey links, tire chain repairs, pretzel links, monkloth, polishing cloths. Peter J. Nagle, pres.; Reginald A. Nagle, vice-pres., pur. agt.; Harold J. Nagle, secy., sales mgr. **Det. Rep.**—George K. Knight, 14175 Rutland ave.

FORD CHAIN BLOCK DIV., American Chain & Cable Co., Inc., 2nd and Diamond sts., Philadelphia, Pa. Chain hoists, screw hoists, differential hoists, trolleys for chain hoists, sling chains. W. B. Lashar, chmn.; W. T. Morris, pres.; W. F. Wheeler, A. P. Van Schaick, C. G. Williams, G. C. Moon, vice-pres.; W. M. Wheeler, secy.; J. O. Lashar, adv. mgr.; C. B. Veit, sales mgr. **Adv. Agcy.** — Reincke - Ellis - Younggreen & Finn, Chicago, Ill.

FORD MOTOR CO., 3674 Schaefer rd., Dearborn, Mich. Ford cars and trucks, Lincoln and Zephyr cars. Edsel B. Ford, pres., treas.; P. E. Martin, vice-pres.; B. J. Craig, secy.; John Crawford, asst. secy. The following do not have the titles but occupy the executive positions as designated. L. S. Sheldrick, motor designer; Joseph Galamb, body engr.; Dale Roeder, chassis engr.; C. E. Sorensen, prod. mgr.; W. J. Cameron, public rel. dir.; E. A. Churchill, traffic mgr.; A. M. Wibel, pur. agt.; John R. Davis, gen. sales mgr.; D. J. Hutchins, truck sales; J. R. Davis, asst. to sales mgr.; T. W. Skinner, sales prom.; R. E. Burns, mgr. spec. truck equip.; R. I. Roberge, exp. sales mgr.; Thomas Naubert, mgr. mech. serv.; Fred Yeager, asst. parts and access. mgr.; A. R. Barbier, adv. mgr. **Adv. Agcy.**—N. W. Ayer & Son, Inc., Philadelphia. (McCann - Erickson, dealer adv.)

(See display advertising index)

FORMICA INSULATION CO., 4614 Spring Grove ave., Cincinnati, O. Automobile timing gears, insulating parts for ignition systems, translucent and decorative sheet for shows, exhibits, etc. H. A. Faber, chmn.; D. J. O'Conor, pres., gen. mgr., secy.; Walter Gebhardt, treas.; W. G. Steiner, sales mgr., adv. mgr.; Robert Lytle, engr.; Henry Heitbrink, pur. agt. **Det. Rep.**—Frank Manley, Book bldg. **Adv. Agcy.** — Chester Moreland Co., Times Star bldg., Cincinnati, O.

(Continued on Next Page)

AUTOMOTIVE DEALERS: The *complete* International Truck line is a big asset to every International dealer. No matter how large or small a truck is called for, International dealers can meet any requirement exactly. See our nearby branch for complete information on this money-making franchise in your community.

SMART APPEARANCE
International light-delivery units in ½-ton to 1-ton capacities, in three wheelbase lengths.

MANEUVERABILITY
International Cab-Over-Engine Model D-300—a new high standard for close work in crowded traffic.

CROSS TOWN OR CROSS COUNTRY
An International 3 to 4-ton Truck-Tractor. International Harvester sells *twice as many* heavy-duty trucks as any other manufacturer.

LET INTERNATIONALS HAUL IT

You get the real measure of International Trucks only when they go to work for you. And then you get a better demonstration of stamina and economy—*more performance per dollar*—than you have ever known before.

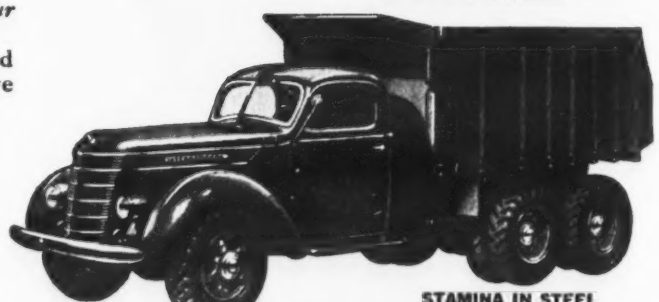
International builds every type of truck to meet every trucking requirement, from ½-ton delivery to powerful six-wheelers. In all, there are 30 models in 99 wheelbase lengths. And every one of them is *all-truck* in every inch and ounce of construction and design.

Every International is engineered for outstanding performance and styled for brilliant appearance. The illustrations on this page show the quality of International design. For performance, let the trucks speak for themselves, for *your* business on *your* job.

There are 242 Company-owned branches and thousands of dealers *at your service,* ready to give you a demonstration at your convenience.

INTERNATIONAL HARVESTER COMPANY
(INCORPORATED)
180 North Michigan Avenue Chicago, Illinois

LEADER IN 1½-TON FIELD
International 1½-ton Model D-30 with special panel-stake body. Several other models for the medium-duty field.



STAMINA IN STEEL
There are many International Six-Wheel Models, Dual-Drive and Trailing-Axle. Gross vehicle weights 18,000 to 62,000 pounds.

INTERNATIONAL

INTERNATIONAL TRUCKS

Who's Who

(Continued from Page 63)

FORT PITT BEDDING CO., Automotive Division, Liverpool and Preble ave., Pittsburgh, Pa. Automotive cushion springs. H. E. Wolf, pres.; J. L. Newnam, sales mgr. Det. Rep.—J. L. Newnam, 703 Basso bldg.

FOSTORIA PRESSED STEEL CORP., N. Main st., Fostoria, O. Replacement fenders, flexible arm industrial machine lamps, filters for cutting and grinding coolants and compressed air lines. C. D. Pifer, chmn.; R. J. Carter, pres., treas.; C. W. McDaniel, vice-pres., secy., sales mgr.; E. L. Bates, vice-pres.; Burtron Zook, adv. mgr.; J. W. Kilmer, engr.; R. L. Hill, pur. agt. Adv. Agcy.—McDaniel, Fisher & Spelman, Inc., 1310 First-Central Tower, Akron, O.

FOUR WHEEL DRIVE AUTO CO., Twelfth st., Clintonville, Wis. Trucks, bodies, winches, pole derricks, trailer hitches, trailers, small utility tools. Walter A. Olen, pres., gen. mgr.; J. D. Cotton, vice-pres.; Frank Gause, secy.; D. J. Rohrer, treas.; R. H. Schmidt, sales mgr.; F. M. Higgins, adv. mgr.; H. B. Dodge, engr.; L. J. Pinkowsky, pur. agt. Det. Rep.—A. B. Polzin, 81 Franklin ct., La Porte, Ind. Adv. Agcy.—Klau-Van Pietersen-Dunlap Assoc., 744 N. Fourth st., Milwaukee, Wis.

FOX CO., 3400-3500 Beekman st., Cincinnati, O. Name plates, escutcheons, decorative metal parts, medallions, emblems, badges, etc. Milford G. Fox, Leonard J. Fox, partners; Frank M. Fox, sales mgr.; Thos. F. Buram, planning mgr.; Geo. Bigler, engr.; E. J. Murray, pur. agt.; E. L. Laws sr., supt. Det. Rep.—E. J. Cosgrave, General Motors bldg.

FREEPORT MACHINE WORKS, Inc., 120-122 E. Main st., Freeport, Ill. Boring machine, line boring machines, casting jigs, etc. F. S. Rosemeier chmn., pres., gen. mgr.; J. F. Schumacher, secy.; A. R. Sears, sales mgr.; Wm. Engelhardt, engr. Det. Rep.—Federal Mogul Service, 4809 John R. st.

FRENCHTOWN PORCELAIN CO., Muirhead ave., Trenton, N. J. Porcelain insulators for spark plugs. Robert W. Ferguson, pres., gen. mgr.; Bessie T. Sinclair, vice-pres.; A. Bruce Campbell, vice-pres., sales mgr., adv. mgr.; Gwendolyn Miller, secy.; S. Kissan Kerr, treas.; Paul R. Babcock, engr.; S. K. Kerr, pur. agt.

FRIEDLI RECORDING DEVICE CO., Rt. 8, Box 558A, Seattle, Wash. Brake tester, decelerometer, headlight tester. John T. Friedli, pres.; R. J. Friedli, secy.; W. J. Friedli, treas.; R. E. Friedli, sales mgr.; John T. Friedli, engr. Bendix Products Corp. are sole agents for the Friedli-Feregan Decelerometer. Det. Rep.—Bendix Products Corp., South Bend, Ind.

FRUEHAUF TRAILER CO., 10940 Harper ave., Detroit, Mich. Commercial truck-trailers, semi-trailers, 4-wheel trailers, pole trailers and heavy duty carryalls. Harvey C. Fruehauf, pres.; Earl L. Vosler, Roy A. Fruehauf, G. W. Chamberlin, vice-pres.; Harry R. Fruehauf, vice-pres., secy.; W. C. Hanway, treas.; G. W. Chamberlin, sales mgr.; L. C. Allmaan, adv. mgr.; F. M. Reid, engr.; E. C. Richter, pur. agt.

FULLER MFG. CO., 1419 N. Pitchor st., Kalamazoo, Mich. Transmissions, clutches, power takeoffs and forgings. J. Seton Gray, chmn., pres.; E. L. Ludrigsen, vice-pres., gen. mgr.; E. A. Pullan, secy.-treas.; W. E. Niness, sales mgr., adv. mgr.; C. A. Cook, engr.; R. World, pur. agt.; C. C. MacDowell, fcty. mgr. Adv. Agcy.—William J. Williams, Kalamazoo, Mich.

FULTON CO., 1912 S. 82nd st., Milwaukee, Wis. Wings, visors, pedal pads, defrosting fans and shields, trailer couplings, gear shift balls. S. A. Fulton, pres., gen. mgr., treas.; F. P. Fulton, vice-pres.; L. M. Fickler, secy., pur. agt.; E. L. Worcester, sales mgr.; B. J. Paulson, adv. mgr.; J. R. Thorp, engr. Det. Rep.—F. P. Fulton, Hotel Barlum. Adv. Agcy.—B. J. Paulson and Associates, Milwaukee, Wis.

G

GABRIEL CO., 1407 E. 40th st., Cleveland, O. Direct acting and thermostatic hydraulic shock absorbers. John J. Batterman, pres.; L. W. Klein, vice-pres., sales mgr.; James M. Murray, secy.; R. F. Moyer, treas.; M. B. Hays, asst. secy.; E. L. Beecher, engr.; Geo. E. McAllister, pur. agt. Adv. Agcy.—Albert P. Hill Co., Inc., Pittsburgh, Pa.

GALION ALLSTEEL BODY CO., South Market st., Galion, O. All types of dump bodies and hydraulic hoists. G. L. Stiefel, pres.; B. J. Heiser, vice-pres., sales mgr.; W. C. Mason, secy.-treas., pur. agt.; J. C. Gay, engr. Det. Rep.—Allied Equipment Co., 432 St. Aubin. Adv. Agcy.—Jay H. Maish Co., Marion, O.

GALVIN MFG. CORP., 4545 Augusta blvd., Chicago, Ill. Automobile radios. P. V. Galvin, pres.; J. E. Galvin, vice-pres.; E. H. Wavering, sales mgr. (auto div.); Victor A. Irvine, adv. mgr.; Don Mitchell, engr.; Carl Zehnle, pur. agt. Adv. Agcy.—Albert Kircher Co., 111 N. Canal st., Chicago, Ill.

GARDINER METAL CO., 4820 S. Campbell ave., Chicago, Ill. Solders, flux solder, babbitt, lead pipe. R. A. Gardiner, pres.; F. W. Murray, vice-pres.; H. J. Gardiner, secy.-treas.

GARDNER DISPLAYS, 520 New Center bldg., Detroit, Mich. Industrial designers, builders of exhibits and displays. W. M. Gardner, pres.; Hi M. Johnson, vice-pres.; M. C. Gardner, secy. Det. Rep.—Hi M. Johnson, 520 New Center bldg.

(Continued on Next Page)

New Commercial Car Registrations, Six Months Total, 1938-1937

Figures supplied by R. L. Polk & Co., New Jersey Motor List Co., and for New York City area by Sherlock & Arnold.

STATES		Autocar	Brockway	Chevrolet	Diamond T	Divco	Dodge	Federal	Ford	G. M. C.	Hudson	Indiana	International	Mack	Plymouth	Reo	Stewart	Studebaker	White	Willys	Misc.	TOTAL		STATES
Alabama	'38			1442	1		254		932	123		2	341	1	26	2			6	15	1	3146	'38	Alabama
	'37			2400	3		467	3	3005	286	29	3	790	2	53	1		11	44	3		7100	'37	
Arizona	'38		1	396	2		104		272	58	6		119	1	25	5		5	8	8	14	1024	'38	Arizona
	'37		1	768	4		182		537	203	20	1	174	14	36	14		29	19	7	7	2016	'37	
Arkansas	'38			1177	16		225		1032	105	3		350		69	3	1	5	5	8	4	3003	'38	Arkansas
	'37			1794	54		303	2	2433	364	19		368	2	88	25		12	5	2	2	5473	'37	
California	'38	69	3	4012	75	5	1596	35	2944	1138	33	18	1373	159	338	177	5	194	145	188	210	12717	'38	California
	'37	66	17	5293	182	12	2327	76	5708	1936	274	39	1775	150	396	183	14	454	206	150	235	19493	'37	
Colorado	'38			744	50		273	3	662	148	2	1	264	18	63	39		11	10	6	13	2307	'38	Colorado
	'37	1		1184	112		433	5	1528	341	66	2	512	21	108	62	2	46	19	2	30	4474	'37	
Connecticut	'38	12	15	536	28	23	207	10	632	135	4	6	348	56	46	22	8	5	33	10	26	2162	'38	Connecticut
	'37	17	19	1212	73	21	373	51	1342	315	35	16	502	113	110	78	18	21	66	1	38	4421	'37	
Delaware	'38	5		333	2		56		136	32		2	69	2	10	6			2	4	12	671	'38	Delaware
	'37	11		472	2	1	45		326	97	5		113	8	16	2	3	5	1		6	1113	'37	
Florida	'38			1022	34		270	13	1287	184	6	3	412	49	68	32		4	21	44	25	3474	'38	Florida
	'37			1481	28	1	483	21	2483	282	40	6	666	44	116	88		17	35	58	10	5859	'37	
Georgia	'38			1453	1	7	331	13	1378	159	6	7	458	35	43	10	1	1	21	23	14	3961	'38	Georgia
	'37			2409	23	3	630	22	3418	434	27	9	611	36	65	4		25	47	9	6	7778	'37	
Idaho	'38			465	22		107		409	78	14		270		32	5		22	6	5	14	1449	'38	Idaho
	'37			706	34		157		729	166	69	1	320	4	51	9		71	16	4	17	2354	'37	
Illinois	'38	33		3469	305	15	1103	62	2884	470	20	6	1854	71	257	115	7	72	127	29	63	10962	'38	Illinois
	'37	31	2	4676	569	53	1983	171	5624	1079	110	25	2557	169	259	151	21	124	213	21	123	17961	'37	
Indiana	'38	1		1834	60	3	700	10	1362	296	9	14	1138	38	157	48	7	69	75	34	15	5870	'38	Indiana
	'37	10	2	2713	183	5	1276	49	3245	809	85	41	1553	50	223	85	50	188	102	38	45	10752	'37	
Iowa	'38	4		1682	76	3	371	8	1265	121	5		846	10	72	28		19	7	10	47	4574	'38	Iowa
	'37			2014	134	3	570	17	2292	301	75	3	1092	13	143	53		83	2	6	17	6818	'37	
Kansas	'38			1687	72	1	289	4	1094	183	17		724	3	81	16		5	14	14	7	4211	'38	Kansas
	'37	2		2016	155	1	413	6	2132	550	94	2	931	6	131	47		71	10	1	29	6597	'37	
Kentucky	'38	4		1417	24	4	378	25	903	286	12	7	725	34	83	31	2	18	27	17	8	4005	'38	Kentucky
	'37	1		1786	72	17	650	59	2091	654	30	28	944	27	153	56	10	61	42	7	12	6700	'37	
Louisiana	'38	1		970	26	4	217		1049	112	4	2	484	12	45	5	3	1	30	19	8	2992	'38	Louisiana
	'37			1488	45		327	6	2091	174	13	4	654	13	54	20		16	25	13	5	4948	'37	
Maine	'38		2	694	9	1	196	3	756	101	8		145	11	26	2		8	5	6	5	1978	'38	Maine
	'37	2	6	1186	5		232	2	1516	212	36		252	20	64	12	3	32	9		5	3594	'37	
Maryland	'38	27	26	970	26	6	316	18	564	102	4	19	335	30	64	15	4	11	49	9	16	2611	'38	Maryland
	'37	32	23	1462	47	16	477	18	1270	252	31	2	466	57	73	9	13	22	75	1	22	4368	'37	
Massachusetts	'38	48	46	1341	66	43	583	37	1763	279	7	6	485	81	90	67	7	9	80	19	26	5083	'38	Massachusetts
	'37	124	68	2439	113	28	945	72	3620	774	140	24	701	155	165	122	52	37	166	1	69	9815	'37	
Michigan	'38	5		1833	31	37	651	53	2013	383	20		600	18	97	72		14	20	28	25	5900	'38	Michigan
	'37	8	1	3374	72	53	1419	129	5005	1066	217	3	839	40	196	172		69	43	5	55	12766	'37	
Minnesota	'38	5	1	1529	83	11	387	27	1458	183	14	2	811	20	85	24		33	30	21	39	4763	'38	Minnesota
	'37	11		2119	149	7	615	43	2658	383	72	13	1075	26	154	39	2	69	47	4	67	7553	'37	
Mississippi	'38			1131	4		169	2	941	98	1	2	466	1	27	5		1	5	6	5	2864	'38	Mississippi
	'37			1892	13		250	1	2466	237	9		748	4	102	7		14	9	2	6	5760	'37	
Missouri	'38	11		2649	92	18	527	42	1740	398	8	8	1063	44	132	66		16	54	39	14	6921	'38	Missouri
	'37	4		4188	192	22	887	54	3540	858	26	13	1404	48	165	45	6	61	106	5	28	11652	'37	
Montana	'38			557	26		116	2	438	90	10		291	1	46	5		26	10	3	13	1634	'38	Montana
	'37			945	54		191	18	941	126	40	4	488	1	51	5		64	23	1	10	2962	'37	
Nebraska	'38			855	26	1	146		726	69	7		461	8	47	17		11	5	9	4	2392	'38	Nebraska
	'37			1060	66	2	224	2	1185	236	23		543	21	55	10		18	7		6	3458	'37	
Nevada	'38			130			30		103	34			40	2	12			4	1	3	2	361	'38	Nevada
	'37			205	34		56		194	60	11		64	4	14	3		25	1		7	678	'37	
New Hampshire	'38	2	2	330	11	1	114	1	285	49	2	2	53	18	12	3	4	3	4	10	3	909	'38	New Hampshire
	'37	1	1	562	3		179	1	683	88	10	1	97	14	23	12	8	19	7		5	1714	'37	
New Jersey	'38	89	72	1982	92	30	834	46	1737	422	26	13	815	163	245	52	16	25	124	33	28	6844	'38	New Jersey
	'37	124	86	2832	334	74	1067	64	3111	629	75	72	1024	269	296	70	38	70	190		52	10477	'37	
New Mexico	'38			486	19		82	1	304	81	2	1	135	1	35	4		1	2	7	3	1164	'38	New Mexico
	'37			720	27		143	2	705	180	24	1	238	8	79	9		17	20		4	2177	'37	
New York	'38	340	322	3867	259	221	2000	34	3368	1138	55	32	1878	480	300	142	83	76	307	41	207	15150	'38	New York
	'37	196	422	6067	536	231	2174	123	6781	2157	107	206	2334	648	382	157	261	136	477	12	163	23570	'37	
North Carolina	'38	8	1	1727	12	9	366	10	1100	165		3	566	37	62	11		1	25	19	16	4138	'38	North Carolina
	'37	10		2868	30	13	728	17	2834	395	43	26	758	67	184	40		12	39	1	19	8084	'37	
North Dakota	'38			364	10		80		356	45	3	1	288	1	20	3		5		2	17	1195	'38	North Dakota
	'37			428	11		79		426	46	11		303		25	8		7			2	1346	'37	
Ohio	'38	28		2467	103	23	945	39	2097	456	13	24	1045	72	156	81	5	55	141	41	77	7868	'38	Ohio
	'37	79	1	4826	205		2009	77	5225	1228	188	89	1801	151	302	171	36	141	351	71	86	17037	'37	
Oklahoma	'38			1671	17		356	6	1663	223	10		732	14	66	3		6	12	32	14	4825	'38	Oklahoma
	'37	5		2322	41		491	13	2696	517	39	2	933	22	102	20		34	35	11	24	7307	'37	
Oregon	'38			653	26		214	22	535	244	11		262	19	53	22		17	29	30	13	2150	'38	Oregon
	'37	1		1327	24		371	48	1417	319	70	12	476	34	76	29		71	48	11	19	4353	'37	
Pennsylvania	'38	132	96	3036	217	74	1361	47	2429	669	22	17	1713	229	337	166	47	108	128	62	102	10992	'38	Pennsylvania
	'37	251	189	5656	425	42	2584	70	5756	1614	70	71	2608	400	563	246	119	264	308	11	197	21444	'37	
Rhode Island	'38	5	3	249	10	5	75	15	233	46	2		75	18	13	1		4	9	1	5	769	'38	Rhode Island
	'37	18	2	367	34	2	170	13	679	133	9	1	78	32	39	14	2	9	14		4	1620	'37	
So. Carolina	'38	1		838	3	4	194		650	74	8	3	206	10	39	3		2	13	14	14	2076	'38	So. Carolina
	'37	1		1348	11	1	378	7	1532	188	33	20	314	29	95	9		16	23	1	6	4012	'37	
South Dakota	'38			353	13		96		301	39	6		235		26	6		4	2	5	17	1103	'38	South Dakota
	'37			426	16		125	1	500	75	9		276	6	29	25		15	2	1	13	1519	'37	
Tennessee	'38	1		1422	9	4	351	49	995	208	4	5	587	2	52	9		17	23	14	8	3760	'38	Tennessee
	'37			2047	58	5	653	62	2306	471	22	5	884	7	121	20		31	50	8	4	6754	'37	
Texas	'38	2		5226	94	6	1163	8	5052	522	43	15	1733	51	303	26		60	87	67	42	14500	'38	Texas
	'37			6502	161	12	1517	18	8308	987	171	39	2534	55	372	49	1	178	126	32	38	21100	'37	
Utah	'38			341	4	1	103		296	69	6		200	3	38			18	5	5	5	1094	'38	Utah
	'37			518	15		176	1	539	135	13	1	232	11	31	1		29	16	7	3	1728	'37	
Vermont	'38		4	228	2		73	5	228	25	1	2	125	1	19	4	1	3	8	2	2	733	'38	Vermont
	'37	1	5	346	19		146	2	554	114	6	1	130	6	27	9	4	8	8		3	1389	'37	
Virginia	'38	24	9	1763	11	2	351	11	1311	235	5	7	400	27	83	7	1	5	16	14	15	4297	'38	Virginia
	'37	25	11	2821	25	1	564	13	2724	431	20	1	593	19	108	21		20	41		3	7441	'37	
Washington	'38			838	26	10	346	5	620	216	18	8	564	29	60	15		34	37	26	30	2882	'38	Washington
	'37			1573	43	10	552	17	1576	445	126	9	798	55	91	46		94	46	17	54	5552	'37	
W. Virginia	'38	1		950	30		260	16	583	138	5		329	5	120	47		8	16	19	4	2531	'38	W. Virginia
	'37	2		1805	75	3	479	26	1587	387	37		478	14	197	78	1	48	43		9	5269	'37	
*Wisconsin	'38	2		1492	103	14	440	7	1238	261	10	3	617	23	121	39	2	16	26	18	15	4447	'38	Wisconsin
	'37	3		2619	236	18	841	24	2697	589	86	8	1033	33	247	81	10	68	53		111	8757	'37	
Wyoming	'38			283	11		94		240	35	5		134		13	5		8	2	3	2	835	'38	Wyoming
	'37	1		390	26		126	4	412	56	13	2	212	9	29	15		26	24		7	1352	'37	
Dist. of Col.	'38	23	6	249	2	22	99	5	203	107	1	1	109	3	6	5	1	2	13	3	3	863	'38	Dist. of Col.
	'37	8	7	466	9	12	164	9	525	190	5	4	142	18	16	6	3	7	20		1	1612	'37	
Total, 6 Months	'38	883	609	65143	2241	608	19599	694	54567	10832	478	242	27273	1911	4220	1471	205	1042	1825	1045	1272	196160	'38	Total, 6 Months
	'37	1046	863	100118	4782	669	31631	1439	114952	23569	2783	810	38418	2955	6475	2438	677	2965	3279	524	1684	342077	'37	

*Estimated by AN.

Who's Who

(Continued from Previous Page)

GARLOCK PACKING CO., Palmyra, N.Y. Water pump seals, grease and oil retainers, non-metallic gaskets, molded rubber specialties. Geo. L. Abbott, pres.; Phil Arnold, vice-pres. (sales); C. R. Hubbard, vice-pres. (prod.); R. M. Waples, secy.; R. J. Hinkle, adv. mgr.; Ford Wilders, mgr. auto prod. div. **Det. Rep.**—G. L. Mack, General Motors bldg. **Adv. Agcy.** — Hutchins Adv. Co., Rochester, N. Y.

GAST MFG. CORP., Bridgman, Mich. Portable spray painting machines. W. C. Gast, gen. mgr., secy.; R. G. Wilson, sales mgr.; Charles A. Baker, engr. **Adv. Agcy.**—Van Auken-Ragland, Inc., 20 N. Wacker dr., Chicago, Ill.

GATKE CORP., 228 N. LaSalle st., Chicago, Ill. Moulded and woven brake linings, clutch facings, asbestos brake and friction blocks, clutch blocks, asbestos cloth, yarn, roving, listing tape, cord, wick and rope and asbestos sheet packing, non-metallic bearings, silent timing gears, pump valves, etc. Thomas L. Gatke, pres., treas.; Frank T. Gatke, vice-pres.; H. L. Berngen, sales mgr. (automotive); H. W. Boyle, adv. mgr.; E. C. Berngen, pur. agt., secy.

GAUTHIER, DONAT A., 7408 Poe ave., Detroit, Mich. Gasoline mileage testers. (See display advertising index)

GEMLOID CORP., 425 Fourth ave., New York, N. Y. Dials, instrument panels, design backgrounds, decorative plastic processes. J. Frank, pres.; P. Richland, vice-pres.

GEMMER MFG. CO., 6400 Mt. Elliott ave., Detroit, Mich. Steering gears. Edward P. Hammond, pres.; John P. Moran, vice-pres.; M. A. Moynihan, secy.-treas., sales mgr.; G. E. Trimm, asst. secy.-treas.; F. E. Phillips, export mgr.; Harper E. Pulleyblank, engr.; Harry A. Johnson, pur. agt.; H. M. Denyes, G. B. Cheetham, C. F. Hammond, sales engr.

GENERAL ALLOYS CO., 387-405 W. First st., Boston, Mass. Heat treating containers, furnace parts, complete line nickel-chromium alloy heat and corrosion resistant castings. H. H. Harris, pres.; G. C. McCormick, vice-pres. in chge of engr. **Det. Rep.**—A. L. Grinnell, 4-137 General Motors bldg.

GENERAL ARMATURE CORP., 700 S. Clinton st., Chicago, Ill., and Lock Haven, Pa. Armatures, starter and generator, generators, field coils, generator parts, generators for wind electric field. M. B. Mervis, chmn.; Lou Mervis, pres., gen. mgr.; H. L. Baer, secy.; H. M. Roberts, asst. treas.; C. J. Rogers, sales mgr.; Lee Beispiel, adv. mgr.; J. C. Cullin, engr.; F. P. Barton, pur. agt.; Roy Yoerhemer, asst. pur. agt.

GENERAL BODY CO., 1851 E. 42nd st. Los Angeles, Calif. House trailers, display coaches, steel chassis and axles. Leo W. Molitor, pres., gen. mgr..

GENERAL BODY CORP., 11830 Charlevoix ave., Detroit, Mich. House trailers. Hugh Chalmers jr., pres.; Thomas E. Jeffries, vice-pres.; Willard S. Worcester, secy.-treas.; R. John Heber, John F. Kircher, directors. **Det. Rep.**—Kircher & Son Sales Co., 4601 Woodward ave. **Adv. Agcy.**—McCann-Erickson, New York, N. Y.

GENERAL BODY & HOIST CO., Paris and Garvey sts., Everett, Mass. Hi-lift hoists, steel or aluminum bodies. "Universal Truck and Trailer Tanks." Gerald S. Connolly, pres., gen. mgr., treas.; Joseph J. Krohn, secy.; T. A. Kirkham, sales mgr.; Robert W. Rose, engr.; Phillip Newman, pur. agt.

GENERAL COACH WORKS, Snover, Mich. House trailers. Guerdon T. Wolfe, pres.

GENERAL ELECTRIC VAPOR LAMP CO., 410 8th st., Hoboken, N. J. Cooper Hewitt lamps, combination lamps, mercury lamps, mercury switches, neon glow lamps. W. A. D. Evans, pres., treas.; R. D. Mailey, N. R. Birge, vice-pres.; E. E. Davies, secy.; C. F. Strebig, sales mgr.; D. R. Grandy, adv. mgr.; B. L. Webster, pur. agt. **Det. Rep.**—G. R. Clover, General Motors bldg. **Adv. Agcy.** G. M. Basford Co., 60 E. 42nd st., New York, N. Y.

GENERAL ETCHING & MFG. CO., 3070 W. Grand ave., Chicago, Ill. Name plates, license plates, serial number plates, dials, panels, scuff and sill plates, decorative metal etchings. H. Moment, pres., treas.; C. R. Moment, vice-pres.; A. Moment, secy., sales mgr. **Det. Rep.**—R. A. Randall, 614 Stephenson bldg.

GENERAL FILTERS, Inc., 9001 Alpine ave., Detroit, Mich. Oil filters. Jervis B. Webb, pres.; A. D. Redner, secy., pur. agt.; R. G. Gregory, sales mgr.

GENERAL LEAD BATTERIES CO., 99-135 Chapel st., Newark, N. J. Lead acid batteries. H. B. Price, pres.; E. G. Maqueston, vice-pres., gen. mgr.; W. C. Stengel, secy.; Geo. W. Younkman, sales mgr.; V. B. Kellar, engr.; J. R. Cully, pur. agt.

GENERAL MOTORS OF CANADA, Ltd., William st., E., Oshawa, Ont. Chevrolet, Oldsmobile, McLaughlin-Buick, Pontiac, G.M.C. trucks. R. S. McLaughlin, pres.; H. J. Carmichael, vice-pres., gen. mgr.; L. R. Beardslee, secy.; M. L. Prentis, treas.; C. E. McTavish, sales mgr.; C. B. Watt, adv. mgr.; G. W. Garner, engr.; R. G. MacFarlane, pur. agt.

GENERAL MOTORS TRUCK & COACH DIV., Yellow Truck & Coach Mfg. Co. South blvd., Pontiac, Mich. Yellow coaches, General cabs, General Motors trucks, General Motors trailers. I. B. Babcock, chmn., pres., gen. mgr.; G. A. Green, vice-pres.; H. E. Listman, vice-pres., coach sales; J. P. Little, vice-pres., truck sales; T. S. Merrill, secy.; D. L. Tate, treas.; H. T. DeHart, adv. mgr.; C. O. Ball, engr.; H. J. Crichton, pur. agt. **Det. Rep.**—H. A. Hand, 3925 Vermont ave. **Adv. Agcy.**—D. P. Brother & Co., General Motors bldg., Detroit, Mich.

GENERAL PLASTICS, Inc., North Tonawanda, N. Y. Plastic molding compounds, bonding and impregnating resins, laminating varnishes, treated paper, oil soluble resins for paints and varnishes. Harry M. Dent, pres.; George Becker, vice-pres.; J. F. Snyder, secy.-treas.; R. M. Crawford, plant mgr.; H. S. Spencer, adv. mgr.; Glenn Loomis, engr.; A. W. Hanmer jr., sales mgr., molding compounds; R. E. Dodd, sales mgr., technical div.; Stephen Babcock, sales mgr., oil soluble div. **Det. Rep.**—J. S. Miller and G. W. Wilcox, 518 New Center bldg. **Adv. Agcy.**—J. M. Mathes, Inc., 122 E. 42nd st., New York, N. Y.

GEUDER, PAESCHKE & FREY CO., 324 N. 15th st., Milwaukee, Wis. Special stamped and drawn parts, streamline armor for fenders; special steel shipping containers. Chas. W. Paeschke, pres.; Frank A. Frey, exec. vice-pres., treas.; H. F. Millman, A. J. Chamerlain, C. H. Voss, vice-pres.; A. K. Paeschke, secy.; H. N. Forsberg, sales mgr.; P. J. Kuipers, pur. agt. **Det. Rep.**—C. R. Harvey, 411 New Center bldg. **Adv. Agcy.**—U. S. Advertising Corp., 612 N. Michigan, Chicago, Ill.

GIBBS BATTERY CO., Inc., Corydon, Ia. Storage batteries, mechanics paste and powder. S. E. Gibbs, pres.; L. R. Butcher, vice-pres.; L. L. Fry, secy.; F. B. Fry, treas.

GILMER, L. H. CO., Keystone and Cottman sts., Philadelphia, Pa. Fan and grinder belts, industrial V-belt, flat and round belts for all purposes. John S. Krauss, pres., gen. mgr.; Hamilton R. Disston, vice-pres.; R. E. S. Geare, vice-pres., sales mgr., engr.; Chas. H. Bridenbaugh, secy.-treas., pur. agt.; H. W. Weihenmayer jr., adv. mgr. **Det. Rep.**—E. W. Bernhard, 6432 Cass ave. **Adv. Agcy.**—Geare-Marstone, Inc., 1600 Arch st., Philadelphia, Pa.

GILSON BOLENS MFG. CO., 216 Park st., Port Washington, Wis. Tractors, power mowers, hydraulic jacks. H. W. Bolens, pres.; B. F. Klein, vice-pres.; A. R. Boerner, sales mgr.

GLIDDEN CO., Madison ave. and Berea rd., Cleveland, O. Paints, varnishes, lacquers and enamels. Adrian D. Joyce, pres., gen. mgr.; R. H. Horsburgh, R. W. Levenhagen, Dwight P. Joyce vice-pres.; C. M. Kolb, secy.; J. A. Peters, treas.; John H. Lathe, sales mgr.; E. W. Clark, adv. mgr.; John M. Stadter, pur. agt. **Det. Rep.**—C. M. Long, 295 Marlboro ave. **Adv. Agcy.**—Meldrum & Fewsmith, Inc., Leader bldg., Cleveland, O.

GLOBE MACHINE & STAMPING CO., 1250 W. 76th st., Cleveland, O. Automotive grilles, burnishing barrels, tumbling barrels, oil burning heat circulator, stampings. H. L. Gaddis, pres., gen. mgr.; R. E. Fries, vice-pres. in chge. of sales; R. A. Cannon, secy.; J. F. Fleek, treas.; N. T. Sawdey, plant supt.; J. Remesch, sales engr.; H. F. Eyring, chief engr.; D. W. Pinkerton, pur. agt. **Det. Rep.**—L. M. Payne, 415 Curtis bldg.

GLOBE-UNION, Inc., 900 E. Keefe ave., Milwaukee, Wis. Batteries, spark plugs, radio parts. C. O. Wanvig, pres.; J. D. Wanvig, W. B. Fyffe, E. T. Foote, vice-pres.; W. Wanvig, secy.; M. W. Lade, treas.; H. H. Frey, sales mgr.; R. P. Hammond, adv. mgr.; J. S. Coldwell, engr.; A. C. Rohde, pur. agt. **Adv. Agcy.**—Klau Van Pieterson-Dunlap Associates, Inc., Milwaukee, Wis.

G & O MFG. CO., 138 Winchester ave., New Haven, Conn. Engine cooling radiators, cores, finned copper radiation, oil temperature regulators. A. J. Verdi, pres.; Vincent Carangelo, vice-pres.; F. I. Newton, secy.; Chas. Oppe, treas., gen. mgr.; Howard C. Oppe, asst. secy.; John J. Curello, engr.; Mrs. May Wellman, pur. agt.; Carl C. Schott, mechanical supt. **Adv. Agcy.**—The Sacks Co., Frost bldg., New Rochelle, N. Y.

GOODRICH, B. F. CO., 500 S. Main st., Akron, O. David M. Goodrich, chmn.; S. B. Robertson, pres.; J. H. Connors, T. G. Graham, J. J. Newman, vice-pres.; S. M. Jett, secy.; V. I. Montenyohl, treas.; T. B. Tomkinson, contr.; A. D. Moss, dir. of purch.; C. B. O'Connor, gen. sales mgr., tire div.; W. S. Richardson., gen. sales mgr.; mech. div.; G. E. Brunner, gen. sales mgr., mfctrs. sales div.; P. C. Henderson, dir. of adv.; F. . Tucker, tire adv. mgr.; H. E. Cook, gen. supt., engr. dept. Tires, tubes, batteries, heaters, accessories, belting, hose, gaskets, floor mats, repair outfits, tubing, etc. **Det. Rep.**—George J. Stritch, Manufacturers' Sales, B. F. Goodrich Co., New Center bldg. **Adv. Agcy.** — Ruthrauff & Ryan, 405 Lexington ave., New York, N. Y. (tires); Griswold & Eshlemaan Co., Terminal Tower, Cleveland, O. (mechanical).
(See display advertising index)

GOODYEAR TIRE & RUBBER CO., Inc., 1144 E. Market st., Akron, O. Tires of all kinds, mechanical rubber goods, rubber flooring, pliofilm. P. W. Litchfield, chmn., pres.; E. J. Thomas, exec. vice-pres.; C. Slusser, vice-pres. in chge. of prod.; P. E. H. Leroy, vice-pres. in chge. of finances; W. D. Shilts, secy.; Z. C. Oseland, treas.; J. M. Linforth, asst. to pres.; R. S. Burnham, mgr. mfrs. sales; R. S. Wilson, vice-pres., sales mgr.; J. K. Hough, adv. mgr.; E. H. Brooks, pur. agt. **Det. Rep.** — Detroit Headquarters, 6500 Mt. Elliott ave.

GOSS, J. C. CO., 36 E. Woodbridge st., Detroit, Mich. Trailer canopies and awnings. H. J. Heiden, pres.; C. W. Videan, vice-pres.; E. H. Wyman, secy.-treas.

GOULDS PUMPS, Inc., 240 Fall Seneca Falls, N. Y. Pumps, oil purifiers. N. J. Gould, pres., secy., sales mgr.; E. W. Medden, treas.; G. W. Cramer, adv.

(Continued on Page 67)

Mack

the Truck Industry's Greatest Retailer Invites you into Partnership

HERE'S the dealer opportunity of a lifetime—brought about by a tremendously increased demand for Mack quality-built trucks. In 1937, Mack showed a sales gain which was 30% higher than the average increase for the whole industry.

Three new Macks—lighter in weight, lower in price, have been added to the Mack line. These new models, ranging from 12,000 lbs. to 16,000 lbs. gross*, have brought Mack stamina and dependability within reach of new thousands of truck operators.

Due to the enthusiastic reception given this new Mack line, Mack now makes available new permanent dealerships in exclusive territories. *How can Mack offer you a profitable, lifetime opportunity like this?*

MACK SUCCESS A RETAILING SUCCESS

Recognized as America's foremost truck-builder, Mack is also America's foremost truck retailer! For 38 years, Mack has specialized in designing and building quality trucks. But Mack has not stopped there—it has followed the policy of actually selling these trucks, and financing them, direct to the ultimate consumer. Mack continues this direct financing today—and the invaluable experience gained through 38 years of retailing will be brought into full play for the benefit of new Mack dealers.

MACK NATION-WIDE SERVICE

Servicing trucks is an asset, not a liability, to the Mack dealer. Mack's network of factory-branches, strategically located throughout the country, makes it easy for the dealer to replace any Mack part. Makes it unnecessary for him to carry large stocks of replacements!

A MACK IS NEVER "ORPHANED"

All parts of a Mack truck are 100%-truck parts, specifically built to do a 100%-truck job. And Mack's rigid service policy of maintaining a complete stock of parts for every model of every age, means that no Mack ever becomes an "orphan." The *right* replacement part is always quickly, easily available. A Mack branch, for instance, recently had a replacement call for a veteran Mack, built in 1915. The part was promptly supplied from stock.

MACK'S HIGHER UNIT-OF-SALE

Profit comes from dollar-volume, *not* number of units sold. Every Mack is specifically built to do a particular truck job. Because of its long-run operating economy, its greater stamina and dependability, its slower depreciation, a Mack commands a more profitable price. This higher-unit-of-sale means greater profit to Mack dealers.

THE GREATEST NAME IN TRUCKING

Mack—a name as old as the century on trucks as new as tomorrow. That, in brief, is Mack's reputation today. Ride—to new business achievement—on the crest of the wave of today's growing demand for quality-built trucks. Write or wire for details of Mack's new permanent dealership opportunities!

*Includes chassis, body and pay-load.

MACK TRUCKS, INC., NEW YORK, N. Y.

COMMERCIAL CAR REGISTRATIONS BY MONTHS, 1932-1937

1937-36 Months		Autocar	Brockway	Chevrolet	Diamond-T	Dodge	Federal	Ford	G.M.C.	Indiana	Inter-national	Mack	Plymouth	Reo	Sterling	Stewart	Studebaker	Terraplane	White	Willys	Miscel-laneous	TOTAL
January	37	130	102	14364	863	3764	207	16548	2820	113	6245	389	217	354	*	92	170	285	479	125	351	47618
	36	75	94	15124	495	6207	223	14606	428	84	4723	90	193	339	8	85	143	59	409	178	177	43760
February	37	112	115	7943	604	5048	207	16467	3053	183	5259	365	715	317	*	101	223	362	367	57	345	41843
	36	57	88	14978	510	5556	170	12226	758	115	4365	107	188	217	4	62	134	94	293	142	237	40301
March	37	179	140	17183	847	6499	240	20838	4199	89	5820	479	1138	497	*	149	476	546	566	76	340	60301
	36	88	127	19511	634	6753	205	16168	1551	119	5395	184	231	264	17	73	221	141	358	143	247	52428
April	37	228	184	22679	916	4084	258	22887	4815	157	6890	594	1203	392	*	121	725	516	662	107	414	67832
	36	121	179	23323	784	8818	271	18497	2733	134	7308	289	293	379	21	112	327	219	566	205	382	64956
May	37	198	183	20772	867	6045	301	20452	4536	111	7279	588	1506	424	*	120	720	509	684	77	485	65857
	36	109	168	21443	754	8507	275	17971	3045	178	6704	440	285	399	16	116	358	240	541	235	399	62183
June	37	199	139	17177	685	6191	226	17760	4146	157	6925	540	1696	454	*	94	651	565	521	82	418	58626
	36	96	137	19045	660	7777	287	16930	2820	135	6151	427	324	325	28	113	320	262	464	239	311	56851
July	37	281	152	17809	764	6508	225	18934	4237	127	7539	622	1715	480	*	107	622	579	540	99	346	61686
	36	137	207	21553	846	8153	280	18639	3501	219	7167	492	320	382	22	132	361	242	529	270	243	63695
August	37	174	134	19477	665	6906	161	16526	4529	99	7700	430	1664	337	*	93	556	539	421	105	356	60872
	36	139	163	20931	801	8298	251	16426	3070	132	6314	434	253	322	39	126	320	204	503	218	278	59222
September	37	184	94	16703	649	6521	131	16292	3602	112	6639	413	1440	268	*	76	355	412	396	75	349	54711
	36	124	138	15589	826	7957	244	17044	3209	135	6640	424	166	521	17	141	327	141	510	251	207	54611
October	37	195	129	10745	486	5142	166	10277	3238	91	6522	436	984	283	*	79	265	267	569	55	317	40246
	36	160	155	7947	988	7546	260	11670	2789	194	6643	509	85	529	38	135	348	59	616	253	296	41220
November	37	151	119	8317	389	3851	122	4567	2297	74	5000	343	721	194	*	66	180	152	407	80	218	27248
	36	180	134	10100	688	5318	230	5182	1284	115	4892	399	40	255	37	99	206	75	542	163	316	30255
December	37	150	102	10505	383	3539	95	7828	2050	58	4356	314	710	254	*	50	186	91	321	184	233	31409
	36	165	105	14800	764	4408	234	11889	1792	145	5636	431	42	295	30	86	214	169	426	144	387	42162

*Included in Miscellaneous

1935-34 Months		Austin	Autocar	Brockway	Buick	Chevrolet	Diamond-T	Dodge	Federal	Ford	G.M.C.	Indiana	Inter-national	Mack	Plymouth	Reo	Sterling	Stewart	Stude-baker	Terraplane	White	Willys	Miscel-laneous	TOTAL
January	'35	35	71	86	28	9867	550	5141	152	13260	858	27	3513	114	5	380	10	42	127	29	281	9	174	34759
	'34	62	79	91	8	8917	406	2581	120	6650	555	80	2284	161	6	289	9	61	98	8	204	2	232	22903
February	'35	34	41	54	12	11701	499	3271	113	14330	570	13	3174	63	3	292	10	34	107	15	204	69	188	34797
	'34	68	58	81	6	10718	420	2723	121	6459	453	57	2150	144	8	339	14	60	109	4	300	5	179	24476
March	'35	30	56	67	22	13744	534	4284	132	16805	850	14	3673	100	8	389	14	60	135	34	244	138	178	41511
	'34	84	64	117	16	15112	501	4154	170	8632	717	61	2841	145	9	461	10	67	126	6	391	2	198	33884
April	'35	14	79	109	21	15024	568	5708	177	17943	870	24	4554	159	18	449	31	62	189	90	285	152	259	46785
	'34	73	88	104	14	15050	534	4367	178	13167	839	64	2729	206	9	527	4	90	123	23	494	2	197	38882
May	'35	17	78	97	14	16284	570	5381	193	17591	883	27	4807	189	54	616	5	60	229	72	267	224	310	47968
	'34	63	146	117	20	14148	508	4441	186	14390	1031	45	2849	212	10	578	10	103	193	88	499	1	193	39831
June	'35	13	73	113	5	17576	572	4911	178	17385	901	38	4710	103	87	439	16	69	218	108	220	266	242	48243
	'34	22	95	108	10	12981	481	3729	196	12205	884	43	2435	154	15	504	9	67	133	72	404	1	230	34778
July	'35	10	99	114	4	18608	593	5336	202	18073	857	103	5308	147	129	439	19	85	219	86	233	298	281	51243
	'34	17	99	147	11	14704	457	4224	182	12492	951	44	2548	202	16	416	17	67	156	67	352		321	37490
August	'35	5	91	143	1	18554	591	5723	219	16429	1312	118	5231	145	110	476	9	94	264	77	236	253	274	50355
	'34	6	61	107	11	15790	508	4754	162	14055	1033	41	2809	143	15	439	15	56	138	52	296	7	292	40790
September	'35	7	75	106	1	13271	529	5635	196	13715	1307	101	4963	81	48	385	9	90	167	65	249	254	136	41390
	'34	5	118	74	12	15159	420	4086	158	12250	1240	39	2538	103	9	369	3	31	153	62	199	1	196	37225
October	'35	5	94	143	3	10310	608	7241	206	13270	1096	220	5845	503	48	604	17	104	233	33	686	218	1756	43243
	'34	24	169	118	10	15723	535	4669	200	13544	1106	156	3238	146	11	364	16	52	212	57	304	2	222	40878
November	'35	5	91	117	4	10944	384	4668	227	14270	813	106	4183	194	35	302	17	91	138	13	394	202	418	37616
	'34	26	85	79	18	11296	305	3868	150	8060	886	69	2626	116	9	393	8	40	131	40	267	1	216	28689
December	'35	6	157	111	3	12475	513	4634	203	13764	1344	132	4052	141	120	551	17	99	99	16	370	197	254	39258
	'34	44	77	70	16	7919	365	4656	139	6346	754	30	2508	98	6	356	19	42	125	38	253	1	208	24070
Total	'35	181	1001	1245	116	167129	6454	61488	2190	185848	11442	862	53471	1515	660	5101	174	880	2100	638	3304	2280	2604	510683
	'34	494	1139	1213	152	157507	5440	48252	1962	128250	10449	729	31555	1830	123	5035	134	736	1697	517	3963	25	2684	403886

1933 Months	Totals	Austin	Autocar	Brockway	Buick	Chevrolet	Diamond-T	Dodge	Federal	Ford	G. M. C.	Indiana	Inter-national	Mack	Plymouth	Reo	Sterling	Stewart	Studebaker**	Terraplane	White	Willys	Miscella-neous*	Totals	Months
January	11709	64	47	39		4884	205	360	52	3734	344	80	983	79		137	12	29	134		207	26	293	11709	January
February	9707	67	41	42		4645	174	348	58	2185	271	64	1126	62		151	8	31	152		116	22	144	9707	February
March	9934	68	45	51		4749	202	489	54	2037	318	77	1201	55		132	5	32	101		97	24	197	9934	March
April	17301	86	76	97		7299	362	870	103	4556	644	120	2021	137		216	12	40	180		81	39	362	17301	April
May	20925	120	106	88		8649	375	1332	138	5665	647	109	2463	152		290	7	70	205		109	24	376	20925	May
June	23254	104	113	66		10191	363	1936	99	6080	583	102	2482	149		278	7	65	184		117	19	316	23254	June
July	30642	91	137	107		14613	440	2582	171	7058	757	160	3007	217		381	18	74	198		143	28	460	30642	July
August	28799	127	127	82		11455	432	4563	134	6840	667	133	2981	143		351	3	106	214		108	13	320	28799	August
September	31281	105	105	103		14038	473	4316	134	7088	592	111	3137	135		281	9	70	234		83	11	256	31281	September
October	28058	82	94	87		10633	498	4363	159	7113	701	130	3095	159		298	9	70	185		124	6	252	28058	October
November	18691	77	142	71		4849	333	3675	115	5524	576	95	2222	218	267		14	49	142		82	9	231	18691	November
December	14580	62	94	42		2875	282	3200	143	4517	502	71	1940	146		260	4	48	72		117	12	181	15580	December
Total	245869	1053	1127	875		98880	4132	28034	1360	62397	6602	1252	26658	1652	267	2775	108	684	2001		1384	233	3388	245869	Totals

*Includes La France-Republic, Pierce-Arrow. **Includes Rockne.

1932 Months	Totals	Autocar	Brockway	Chevrolet	Diamond-T	Dodge	Federal	Ford	G. M. C.	Indiana	Inter-national	La France-Republic	Mack	Pierce-Arrow	Reo	Sterling	Stewart	Studebaker	White	Willys-Overland	Miscella-neous*	Totals	Months
January	14767	43	77	5317	177	757	71	5119	496	*	1314	40	100	11	354	38	53	160	122	128	390	14767	January
February	14522	62	75	5581	171	621	97	4722	510	*	1271	23	110	17	292	25	86	190	147	115	407	14522	February
March	16759	166	57	6541	185	816	94	4723	541	22	1584	28	142	3	344	36	105	217	567	138	450	16759	March
April	17777	141	106	7058	238	958	149	4466	812	52	1784	26	197	5	356	24	118	301	452	137	397	17777	April
May	18688	81	74	6003	249	1015	142	7067	610	73	1703	15	184	17	357	16	123	276	144	116	423	18688	May
June	17813	99	95	5531	215	882	105	7200	596	115	1522	7	167	4	315	26	87	226	123	99	399	17813	June
July	14695	71	51	4370	192	763	95	5982	599	115	1216	8	106	6	240	17	46	205	118	88	407	14695	July
August	15010	60	49	4908	139	665	79	6282	492	114	1198	7	77	14	211	12	61	235	84	66	257	15010	August
September	15180	58	44	5300	176	657	95	6143	386	133	1243	9	82	4	230	10	57	169	110	54	220	15180	September
October	15157	98	58	5118	199	638	83	6127	491	160	1227	10	107	12	203	10	44	193	71	61	247	15157	October
November	10389	62	71	2486	161	534	76	4747	454	71	895	5	86	10	158	8	49	149	92	56	219	10389	November
December	9216	68	55	2516	137	417	81	4079	362	69	719	2	63	6	123	5	37	104	108	70	195	9216	December
Yearly Totals	179973	1009	812	60729	2239	8723	1167	66657	6349	924	15676	180	1421	109	3183	227	866	2425	2138	1128	4011	179973	Yearly Totals

*Combined with Brockway.

Who's Who

(Continued from Page 65)

mgr.; John Mann, engr.; C. H. Kissel, pur. agt. Adv. Agcy.—O. S. Tyson & Co., Inc., 230 Park ave., New York, N. Y.

GRAFO LUBRICANTS CORP., 310 Wilkes pl., Sharon, Penn. Crankcase lubricants, upper motor lubricants, colloidal graphite in water, colloidal graphite for compounding. L. I. Willson, chmn., Edward Acheson Willson, pres.; J. A. Willson, vice-pres.; J. S. Gunther, secy.; E. A. Willson, treas.; Louis D. Garratt, sales mgr.

GRAHAM-PAIGE MOTORS CORP., 8505 W. Warren ave., Detroit, Mich. Passenger cars and automobile service parts, farm tractors. Joseph B. Graham, pres., gen. mgr.; Robert C. Graham, exec. vice-pres.; R. E. Stone, vice-pres., mfg.; E. R. Harrell, vice-pres., engr.; Walter F. Wright, vice-pres., sales.; R. Carl Hicks, secy.-treas. R. E. Margenau, asst. secy.-treas.; S. J. Case, adv. mgr.; C. H. Richter, pur. agt. Det. Rep.—Lee D. Schwartz, dist. mgr., 3740 Cass ave. Adv. Agcy.—J. Walter Thompson Co., 420 Lexington ave., New York, N. Y.

GRAMM MOTOR TRUCK CORP., Delphos, O. Motor trucks, trailers, semi, 4-wheel, all types of bodies and fire equipment chassis. B. A. Gramm, pres., gen. mgr., treas.; W. J. Gramm, vice-pres., adv. mgr., engr.; E. T. Lippincott, secy., atty.; H. E. Ream, auditor, asst. treas.; E. L. Warren, asst. sales mgr.; V. D. Buchanan, pur. agt.; R. E. Linson, serv. mgr.

GRAPHO PRODUCTS, Inc., 2232 Alvord st., Indianapolis, Ind. Water pumps, parts and packing, starting cranks, industrial packing, lubricants. Al A. D. Smith, pres., sales mgr., adv. mgr.; D. I. Smith, vice-pres., treas., gen. mgr.; H. P. Davison, secy., asst. treas.; R. W. Smith, engr.; F. R. Coxen, pur. agt. Adv. Agcy.—O. R. French, St. Louis, Mo.

GRAY CO., Inc., 60 11th ave., N.E., Minneapolis, Minn. Commercial lubricating equipment. L. L. Gray, pres.; H. A. Murphy, vice-pres.; G. T. Rosholt, adv. mgr.; R. J. Gray, engr. Det. Rep.—Paul R. Acton, 500 Michigan Theatre bldg.

GREAT LAKES FORGE CO., 1220 W. 119th st., Chicago, Ill. Forgings. G. C. Hodgson, pres.; W. C. West, vice-pres. Det. Rep.—A. L. Moses Co., 637 New Center bldg.

GREAT LAKES STEEL CORP., Tecumseh rd., Ecorse, Mich. Hot rolled strip and sheets, spring steel, merchant and forging bars, automobile bumper sections, miscellaneous bar mill sections, billets, sheet bars, automobile sheets, cold rolled sheets, single pickled sheets, black sheets, deep drawing quality. Ernest T. Weir, chmn.; George R. Fink, pres.; David Thomson, vice-pres., gen. mgr.; George G. Gries, Edward L. Wetstein, vice-pres.; Frank M. Hesse, secy.; Lacey S. Brown, treas.; Forrest W. Manker, sales mgr.; Julius A Clauss, engr.; Paul T. Farrell, pur. agt.

GREENFIELD TAP & DIE CORP., Sanderson st., Greenfield, Mass. Taps, dies, twist drills, screw extractors, reamers, gages, screw plates, pipe tools, etc. Frederick H. Payne, chmn.; Donald G. Millar, pres.; Francis A. Smith, vice-pres., gen. mgr.; William B. du Mont, vice-pres., sales mgr.; Frank A. Yeaw, treas.; John B. Roys, comptr.; Edward C. Bailey, adv. mgr.; Oscar Koehler, engr.; James Harrington, pur. agt. Det. Rep.—John K. Penny, 2102 W. Fort st., Adv. Agcy.—Galen Snow, Inc., 95 State st., Springfield, Mass.

GREENLEE BROS & CO., 12th st. and Columbia ave., Rockford, Ill. Multiple spindle drilling, tapping and boring machines, automatic screw machines, magging and cleaning benches, woodworking machinery. G. C. Purdy, pres., gen. mgr.; W. B. Greenlee, vice-pres., treas.; A. H. Eggers, vice-pres., sales mgr. mach. tool; A. E. Alverson, secy.; O. V. Haegg, sales mgr, woodworking dept.; R. E. Brightup, adv. mgr.; J. H. Mansfield, engr.; A. M. Doran, pur. agt.; J. H. Abramson, works mgr. Det. Rep.—Greenlee Bros. & Co., J. M. Macrae, mgr., 504 Curtis bldg.

GRINDER SUPPLY CO., 5071 Wabash ave., Detroit, Mich. Cylinder hone stone replacements, feeler gauges. J. R. Peckham, owner and mgr.

GROOV-PIN CORP., 411-413 Kerrigan ave., Union City, N. J. Groov-pins, drive-studs, self threading groov-screws. Ewald H. Schniewind, chmn., pres.; E. G. Theurer, vice-pres., treas., gen. mgr.; Rolf Lindenhayn, secy.; F. Braendel, engr.; F. O. Becker, pur. agt. Det. Rep.—H. P. Hoffman, 7338 Woodward ave.

GUARANTEED PARTS CO., Inc., 250 W. 54th st., New York, N. Y. Ignition parts, coils, condensers, distributor caps, rotors, contact points, cutouts, brushes, starter switches. A. S. Hecht, pres.; Marco Hecht, gen. mgr.; M. E. Boehm, sales mgr.; W. Friedman, adv. mgr.; H. Eisner, engr.; H. Miller, pur. agt. Det. Rep.—Roger G. Symms, Ft. Wayne, Ind.

GUIDE LAMP DIV., General Motors Corp., Anderson, Ind. Headlamps, side tail, fender and dome lamps, direction signals, hub caps, bumper guards, headlamp testing machines and output meters. F. L. Burke, gen. mgr.; C. J. McLaughlin, sales and adv. mgr.; R. N. Falge, engr.; H. Earl, pur. agt. Adv. Agcy. — Campbell - Ewald Co., Detroit, Mich.

H

HALL, C. M. LAMP CO., 1035 E. Hancock ave., Detroit, Mich. Lighting equipment. W. F. Anklam, pres., gen. mgr.; B. D. Granger, vice-pres.; G. A. Haire, secy.-treas.; A. B. Hartz, Howell Van Auken, A. E. West, B. G. Vernor, directors; L. A. Wine, sales mgr.; A. N. Taylor, engr.; J. A. Janissee, pur. agt.

HALL MFG. CO., 1560 Woodland ave., Toledo, O. Valve seat grinders, seat inserters, hydraulic brake hones, ring ridge reamers, valve refacers, cylinder hones, piston pin hones, Hall valve seat inserts. E. A. Hall, pres.; R. P. Hall, vice-pres.; G. A. Powers, secy.-treas.; Geo. W. Smith, asst. sales mgr.; R. S. Beverlin, engr.; W. C. Kopfman, pur. agt.; F. J. Lanzinger, fcty. supt. Det. Rep. — Kenneth Richcreek, Toledo, O. Adv. Agcy.—H. F. Bradford Co., 1220 Madison ave., Toledo, O.

HALSTEAD PRODUCTS CO., 2921 Chapman st., Oakland, Calif. Tune-up oil, penetrating oil, break-in oil. C. C. Broadwater, pres.; C. C. Curtis, vice-pres.; H. S. Shuey, secy.-treas.; W. H. Wilde, sales mgr.; C. C. Curtis, engr.

HAMILTON-WADE CO., 52-62 Haverhill st., Brockton, Mass. Welts, gimps and bindings, made from genuine leather, artificial leather, rubberized cloth and various fabrics. James Christie, pres., treas.; Freeman A. Fisher, vice-pres.; LeRoy F. Emery, secy.

HAMLIN METAL PRODUCTS CO., Inc., 58 W. Exchange, Akron, O. Automotive stampings, gas tank straps, stampings for moulded rubber-to-metal parts, grille and trunk guards, specialties. E. W. Hamlin, pres., gen. mgr.; M. D. Kuhlke, vice-pres.; J. A. Loftus, secy.-treas.; M. D. Walklet, sales mgr., pur. agt.; C. E. Brimston, engr. Det. Rep.—Juhl & Young, 7338 Woodward. Adv. Agcy. — Arnold Advertising Agency, Wooster, O.

HAMMER BLOW TOOL CO., 602½ Third st., Wausau, Wis. Trailer axles, hitches, and other trailer parts. T. H. Jacob, pres., gen. mgr.; L. B. Jacob, vice-pres.; Lyle D. Rounds, sales and adv. mgr.; Carl Braatz, engr.; C. A. Merklein, secy.-treas. Adv. Agcy.—Van Hecker & McLoed, Chicago, Ill.

HANCOCK MFG. CO., 225 N. Horton st., Jackson, Mich. Body hardware and steel stampings, locks, hinges. H. W. Hancock, pres., gen. mgr.; F. H. Wood, vice pres.; R. W. Hancock, sales mgr., adv. mgr., treas.; R. Marple, engr.; J. C. Wood, secy., pur. agt. Det. Rep.—George P. Hooper, 918 Fisher Bldg.

HANGLITER MFG. CO., 983 S. Raymond ave., Pasadena, Calif. Piston rings, compression, scraper, channel oil expander. William Hangliter, owner; O. N. Burch, gen. mgr.; A. K. Eckenrode, supt.

HANDY GOVERNOR CORP., 3925 West Fort st., Detroit, Mich. Governors (velocity and mechanical), air cleaners, oil-filters and conditioners. A. A. Bull, pres., gen. mgr.; R. C. Hill, sales mgr., adv. mgr.; R. C. Darnell, engr.; F. J. Hardiman, pur. agt.

(See display advertising index)

HARLEY-DAVIDSON MOTOR CO., 3700 West Juneau ave., Milwaukee, Wis. Package trucks, accessories. Walter Davidson, pres., gen. mgr.; Wm. H. Davidson, vice-pres.; Arthur Davidson, secy., sales mgr.; W. E. Kleimenhagen, adv. mgr.; Wm. S. Harley, treas., engr. Adv. Agcy.—Klau-Van Pieterson-Dunlap, Assoc., Inc., 744 N. 4th st., Milwaukee, Wis.

HARNISCHFEGER CORP., 4400 W. National ave., Milwaukee, Wis. Overhead electric cranes, hoists, motors, arc welders, welding electrodes and positioners, industrial cranes, excavators. H. Harnischfeger, pres.; H. Strause, vice-pres., treas.; A. W. Coppin, secy.; C. W. Daniels, sales mgr.; E. T. Slackford, adv. mgr.; H. C. Hettelsaeter, exec. engr.; F. H. Gavigan, pur. agt. Det. Rep.—F. A. Liebic, 843 Book bldg. Adv. Agcy.—Buchen Co., 400 W. Madison st., Chicago, Ill.

HARRISON RADIATOR DIV. GENERAL MOTORS CORP., Washburn and Walnut sts., Lockport, N. Y. Radiators, heaters, thermostats, heat exchangers. F. M. Hardiman, gen. mgr.; L. J. Schneider, sales mgr.; K. F. Covert, adv. mgr.; J. R. Holmes, engr.; B. A. Bolton, pur. agt. Det. Rep.—L. J. Schneider, General Motors bldg. Adv. Agcy. — Campbell-Ewald Co., General Motors bldg., Detroit, Mich.

(See display advertising index)

HASKELITE MFG. CORP., 208 W. Washington st., Chicago, Ill. Metal covered plywood for side paneling and doors, compound lumber for interior sheathing, and flooring. G. R. Meyercord, pres.; G. R. Meyercord, jr., vice-pres. in charge of sales; O. H. Basquin, vice-pres. in charge of engineering; L. C. Nash, asst. sales mgr.; J. A. Potchen, chief factory engr. Det. Rep.—E. W. & R. G. Stoner, 6432 Cass ave. Adv. Agcy. —Evans Associates, Inc., 225 N. Michigan ave., Chicago, Ill.

HASKINS, R. G. Co., 615 S. California ave., Chicago, Ill. Flexible shaft equipment, tapping machines, power screw drivers. R. G. Haskins, pres., treas.; G. E. Haskins, vice-pres.; E. P. Grismer, sales mgr., secy.; P. M. Gardanier, adv. mgr.; A. E. Turner, engr.; B. G. Lund, pur. agt. Det. Rep.—Manufacturers Sales Co., 2180 E. Grand Blvd.

HASTINGS MFG. CO., Hastings, Mich. Piston rings, expanders, valve rings. E. Tyden, pres.; A. E. Johnson, vice-pres., gen. mgr.; C. W. Dolan, secy., sales mgr.; R. A. Groos, treas.; George Hebden, adv. mgr.; Harold Phillips, engr.; H. A. Frost, pur. agt. Det. Rep.—C. R. Ranks, 13562 Birwood. Adv. Agcy.—Keeling & Co., Indianapolis, Ind.

HAYES BODY CORP., Seventh and Muskegon aves., Grand Rapids, Mich. Bodies, metal stampings, tools, jigs, dies, fixtures, house and commercial display trailers. A. A. Anderson, pres.; A. J. Connolly, vice-pres., gen. mgr.; O. W. Bimie, secy.-treas.; McKee Robison, asst. secy.; Paul DeMaagd, sales mgr. trailer div.; Frank W. Pease, engr.; R. C. Croly, pur. agt.

HAYES INDUSTRIES, Inc., Fern and Wildwood aves., Jackson, Mich. Hood

(Continued on Page 69)

What a business sees ahead governs the success it will attain. For more than a quarter century Eaton's outlook has been toward greater and yet greater achievement in automotive transportation. The occasional brief pauses that have occured in this mighty industry have been utilized by Eaton to perfect plans and develop products for the faster stride of an always hopeful tomorrow. Today Eaton is better prepared than ever to serve the makers of American motor cars and trucks who, without a single exception, use products built by Eaton.

Products Built by Eaton:

AXLES • VALVES • TAPPETS • SEAT RINGS • BUMPERS
LEAF AND COIL SPRINGS • HEATERS • STAMPINGS
GREY IRON CASTINGS • SPRING WASHERS

EATON MANUFACTURING COMPANY • CLEVELAND, OHIO

EATON

PLANTS: CLEVELAND • DETROIT • SAGINAW • MARSHALL • BATTLE CREEK • JACKSON • VASSAR • MASSILLON

Total Motor Truck Registrations by States, '29-'37

(Figures from U. S. Bureau of Public Roads as of December 31)

States	1929	1930	1931	1932	1933	1934	1935	1936	1937
Alabama	37,832	37,976	33,972	31,575	29,838	34,101	39,300	50,735	56,111
Arizona	10,686	12,045	12,633	14,687	14,569	16,791	‡17,964	20,183	22,973
Arkansas	39,732	26,986	31,275	22,989	32,980	35,700	40,343	47,838	55,944
California	214,033	230,387	245,213	234,177	220,087	**237,556	253,908	267,451	295,275
Colorado	28,501	31,662	32,082	30,357	27,433	27,858	‡28,430	31,930	55,094
Connecticut	50,006	51,096	52,227	51,388	52,564	55,878	63,166	60,058	68,091
Delaware	10,232	10,576	*9,991	*8,666	*8,485	9,394	9,692	10,010	10,314
Florida	57,293	53,096	51,724	37,955	45,019	55,359	‡57,199	63,885	70,308
Georgia	48,543	47,119	46,264	42,050	51,212	60,262	66,451	72,726	78,206
Idaho	13,676	14,551	15,435	14,030	14,884	17,861	21,488	25,852	28,505
Illinois	*203,335	207,584	201,509	177,820	*186,186	174,265	185,477	203,098	214,379
Indiana	125,349	128,397	129,826	122,019	116,361	122,791	133,656	137,809	140,292
Iowa	69,531	72,190	78,414	74,882	69,490	75,350	‡80,529	83,849	87,868
Kansas	*73,694	*83,139	*80,484	*71,778	*72,404	75,565	80,068	87,113	93,046
Kentucky	34,132	35,841	34,969	31,621	32,111	37,445	44,083	51,840	59,341
Louisiana	46,303	44,697	47,783	41,853	42,007	44,779	‡59,398	73,628	77,833
Maine	36,544	37,435	38,771	36,203	35,271	37,693	38,204	40,948	43,171
Maryland	¶38,839	37,832	36,080	41,527	34,728	45,351	49,430	54,398	54,482
Massachusetts	98,268	102,918	103,888	102,959	99,854	98,508	104,933	102,630	104,035
Michigan	*175,944	*167,158	*152,635	123,273	*121,639	123,405	127,283	138,984	145,446
Minnesota	99,696	108,070	108,435	101,650	99,130	103,882	106,102	114,448	118,161
Mississippi	32,649	33,651	*30,721	*25,164	32,924	34,115	‡33,306	43,359	53,072
Missouri	*85,443	*91,455	*95,975	*99,265	*103,795	107,709	116,228	127,971	134,001
Montana	25,102	25,619	* 24,037	*20,521	*27,480	31,087	35,542	39,311	39,163
Nebraska	42,280	58,642	59,848	52,294	53,947	56,560	59,330	60,595	61,893
Nevada	6,613	6,257	6,950	6,527	5,927	6,391	6,980	7,680	8,092
New H'mpsh'r	13,980	19,028	18,671	17,378	19,872	22,382	23,455	24,875	25,956
New Jersey	133,373	133,154	133,361	128,604	122,228	123,351	129,891	129,940	132,702
New Mexico	2,374	†13,700	15,884	15,020	15,290	16,112	18,620	22,823	27,273
New York	341,191	340,749	330,813	313,765	298,508	298,379	‡306,919	319,192	328,008
North Carolina	52,951	56,108	54,575	50,262	49,660	54,766	58,380	69,738	75,453
North Dakota	25,954	27,636	26,588	23,590	*25,342	26,315	28,851	29,650	32,084
Ohio	206,432	204,270	*191,929	167,492	*158,189	159,845	170,954	172,273	180,484
Oklahoma	60,390	59,384	54,585	44,884	65,957	73,928	85,162	90,638	98,675
Oregon	21,876	22,437	22,950	34,477	a32,208	41,411	43,177	54,599	60,659
Pennsylvania	217,408	218,687	219,812	216,334	219,497	215,016	234,564	277,110	247,024
Rhode Island	19,999	19,631	19,565	18,416	17,965	18,332	18,928	18,723	19,003
South Carolina	25,591	26,261	23,439	19,722	17,795	20,877	29,905	35,167	45,404
South Dakota	*22,780	24,977	23,516	19,542	22,764	23,832	26,991	28,216	28,795
Tennessee	*32,734	37,823	33,976	31,434	33,848	37,755	42,451	51,387	58,736
Texas	182,957	206,757	210,991	191,462	188,676	226,276	257,809	285,977	314,766
Utah	17,000	17,869	17,577	16,096	16,348	17,103	18,050	19,397	21,121
Vermont	8,559	8,226	8,453	8,309	7,924	c8,612	e9,133	28,845	r9,352
Virginia	58,680	57,307	56,633	62,344	56,656	57,268	60,929	65,182	69,005
Washington	62,346	63,188	60,082	63,826	62,548	64,321	‡68,657	79,538	84,577
West Virginia	40,173	40,373	39,359	32,916	33,415	27,253	29,949	43,483	44,675
Wisconsin	104,055	105,110	113,773	108,047	104,347	120,180	130,685	144,653	141,208
Wyoming	8,800	9,922	10,713	9,879	10,643	13,102	‡14,593	15,474	17,378
Dist. of Col.	15,995	16,943	18,185	18,286	16,742	17,263	18,689	18,397	18,862
Totals	**3,379,854**	**3,486,019**	**3,466,571**	**3,229,315**	**3,226,747**	**3,409,335**	**3,685,232**	**4,023,606**	**4,255,296**

†Big increase due largely to reclassification of trucks previously classified as passenger cars. ¶In 1928, 27,089 commercial cars with pneumatic tires were included under passenger cars, practically all of which were classed as trucks in 1929. aIncludes 11,700 light delivery cars. cLight delivery trucks with passenger cars. eIncludes buses. ‡Buses not included. *Includes buses; other states include buses with passenger cars. **Includes 23,194 con tract carriers, freight and passenger; common carriers, in passenger registrations. rTrucks under 1,500-lb. capacity included with passenger cars.

Pneumatic Casings--Tubes--Solids

PRODUCTION (81% FOR 1937, 1936; 97% FOR 1934-1935; 80% FOR PREVIOUS YEARS)

	1937 (12 Mos.)	1936 (12 Mos.)	1935 (12 Mos.)	1934 (12 Mos.)	1933 (12 Mos.)	1932 (12 Mos.)	1931 (12 Mos.)	1930 (12 Mos.)
Balloon Casings	41,654,204	43,319,814	43,944,241	40,632,050	32,051,760	28,139,261	33,445,306	33,868,514
High Pressure Casings	3,126,173	3,754,429	3,936,689	5,183,713	4,191,624	3,928,471	5,546,914	6,903,854
Total Casings	44,780,377	47,074,243	47,880,830	45,815,763	36,243,384	32,067,732	38,992,220	40,772,378
Balloon Inner Tubes	39,391,073	42,923,216	42,830,162	39,113,104	29,106,512	24,998,385	31,353,440	33,077,435
High Pressure Inner Tubes	2,717,723	3,447,302	3,612,502	5,727,867	4,938,177	4,514,861	7,313,936	8,858,573
Total Inner Tubes	42,108,796	46,370,518	46,442,664	44,840,971	34,044,689	29,513,246	38,666,376	41,936,008
Solids and Cushions*	533,930	390,899	282,647	197,497	130,987	97,089	136,261	204,340
Solids and Cushion Inventory end of Periods	103,510	60,278	46,406	24,710	26,271	23,830	38,815	75,871

SHIPMENTS (81% FOR 1937, 1936; 97% FOR 1934-1935; 80% FOR PREVIOUS YEARS)

Balloon Casings	41,819,859	41,136,134	44,727,829	40,171,288	31,070,090	28,064,272	30,084,198	34,939,030
High Pressure Casings	3,107,867	3,707,685	4,069,559	5,114,667	4,204,880	4,136,548	5,964,354	7,974,078
Total Casings	44,927,726	44,843,819	48,797,388	45,285,955	35,274,970	32,200,820	40,048,552	42,913,108
Balloon Inner Tubes	39,644,008	40,804,080	42,942,275	37,987,646	28,206,370	25,361,390	32,112,341	33,847,719
High Pressure Inner Tubes	2,781,085	3,441,620	3,798,354	5,706,484	4,906,102	4,967,146	7,904,834	10,104,515
Total Inner Tubes	42,425,093	44,245,700	46,740,629	43,694,130	33,112,472	30,328,536	40,017,175	43,952,234
Solids and Cushions*	499,566	369,499	274,837	187,152	126,990	108,581	167,556	250,635

*Includes Industrial Pneumatic and Solid Truck, Tractor and Trailer tires.

United States Exports of Passenger Cars And Chassis from 1935-1937

Year	Under $850. Units	Under $850. Value	$850.-$1200. Units	$850.-$1200. Value	$1200.-$2000. Units	$1200.-$2000. Value	Over $2000. Units	Over $2000. Value	Total Units	Total Value
1937	208,391	$111,858,381	17,754	$16,789,385	2,403	$3,652,738	938	$2,514,221	229,486	$134,814,725
1936	165,501	$ 86,788,566	11,758	$11,238,283	1,817	$2,722,621	881	$2,274,784	179,957	$103,024,254
1935	161,535	$ 81,867,580	8,759	$ 8,304,968	1,463	$2,224,426	815	$2,113,783	172,572	$ 94,510,757

1937 Commercial Car Sales Gains

List of States in Order of Volume

STATE	1937	1937 Pos.	1936	1936 Pos.	Unit Gain	Pct. Gain
New York	41,922	1	39,159	2	2,763	7.1
Texas	40,905	2	38,903	3	2,002	5.1
Pennsylvania	39,150	3	41,919	1	2,769*	6.6*
California	36,901	4	33,656	4	3,245	9.6
Illinois	30,451	5	31,123	5	672*	2.1*
Ohio	28,440	6	30,028	6	1,588*	5.3*
Michigan	24,549	7	24,840	7	291*	1.2*
Missouri	19,170	8	20,142	8	972*	4.8*
New Jersey	18,446	9	16,935	10	1,511	8.9
Indiana	18,269	10	20,027	9	1,758*	8.7*
Wisconsin†	16,412	11	16,237	11	175	1.1
Massachusetts	16,235	12	15,350	12	885	5.7
North Carolina	15,691	13	14,286	14	1,405	9.8
Oklahoma	14,702	14	14,737	13	35*	.23*
Minnesota	13,555	15	14,144	15	589*	4.2*
Georgia	12,998	16	12,941	18	57	.44
Virginia	12,928	17	12,904	19	24	.18
Alabama	12,874	18	13,187	16	313*	2.3*
Iowa	12,449	19	12,999	17	550*	4.2*
Kansas	12,409	20	11,406	20	1,003	8.8
Kentucky	11,597	21	10,870	22	727	6.7
Mississippi	11,176	22	10,367	24	809	7.8
Arkansas	10,836	23	9,485	26	1,351	14.2
Tennessee	10,799	24	11,062	21	263*	2.4*
Florida	10,722	25	9,412	27	1,310	13.9
Washington	10,222	26	10,666	23	444*	4.2*
Louisiana	10,111	27	9,753	25	358	3.6
West Virginia	9,269	28	9,181	28	88	1.0
Colorado	8,411	29	9,060	29	649*	7.1*
Oregon	7,859	30	8,050	31	191*	2.4*
Connecticut	7,767	31	8,240	30	473*	5.7*
Maryland	7,763	32	7,382	32	381	5.2
South Carolina	7,257	33	6,091	35	1,166	19.1
Nebraska	6,202	34	6,996	33	794*	11.3*
Maine	5,658	35	5,337	36	321	6.0
New Mexico	5,089	36	4,545	38	544	12.0
Montana	5,044	37	5,930	35	886*	15.0*
Idaho	4,454	38	4,939	37	485*	9.8*
Arizona	3,659	39	3,510	40	149	4.2
Utah	3,298	40	3,571	39	273*	7.6*
North Dakota	3,193	41	2,680	44	513	19.1
New Hampshire	3,022	42	3,196	41	174*	5.4*
District of Columbia	2,857	43	2,940	43	83*	2.8*
Rhode Island	2,749	44	2,594	46	155	6.0
South Dakota	2,659	45	2,962	42	303*	10.2*
Wyoming	2,627	46	2,661	45	34*	1.3*
Vermont	2,444	47	2,308	47	136	5.9
Delaware	1,882	48	1,723	48	159	9.2
Nevada	1,167	49	1,210	49	43*	3.6*
TOTAL	**618,249**		**611,644**		**6,605**	**1.1**

†Estimated by AN. *Loss.

List of States in Order of Percentage of Sales Increases of Commercial Cars

STATE	Pct. Gain	Unit Gain	Gain Pos.	1937	1937 Pos.	1936	1936 Pos.
South Carolina	19.1‡	1,166	1	7,257	33	6,091	35
North Dakota	19.1‡	513	2	3,193	41	2,680	44
Arkansas	14.2	1,351	3	10,836	23	9,485	26
Florida	13.9	1,310	4	10,722	25	9,412	27
New Mexico	12.0	544	5	5,089	36	4,545	38
North Carolina	9.8	1,405	6	15,691	13	14,286	14
California	9.6	3,245	7	36,901	4	33,656	4
Delaware	9.2	159	8	1,882	48	1,723	48
New Jersey	8.9	1,511	9	18,446	9	16,935	10
Kansas	8.8	1,003	10	12,409	20	11,936	20
Mississippi	7.8	809	11	11,176	22	10,365	24
New York	7.1	2,763	12	41,922	1	39,159	2
Kentucky	6.7	727	13	11,597	21	10,870	22
Maine	6.0	321	14	5,658	35	5,337	36
Rhode Island	6.0	155	15	2,749	44	2,594	46
Vermont	5.9	136	16	2,444	47	2,308	47
Massachusetts	5.7	885	17	16,235	12	15,350	12
Maryland	5.2	381	18	7,763	32	7,382	32
Texas	5.1	2,002	19	40,905	2	38,903	3
Arizona	4.2	149	20	3,659	39	3,510	40
Louisiana	3.6	358	21	10,111	27	9,753	25
Wisconsin†	1.1	175	22	16,412	11	16,237	11
West Virginia	1.0	88	23	9,269	28	9,181	28
Georgia	.44	57	24	12,998	16	12,941	18
Virginia	.18	24	25	12,928	17	12,904	19
Oklahoma	.23*	35*	26	14,702	14	14,737	13
Michigan	1.2*	291*	27	24,549	7	24,840	7
Wyoming	1.3*	34*	28	2,627	46	2,661	45
Illinois	2.1*	672*	29	30,451	5	31,123	5
Alabama	2.3*	313*	30	12,874	18	13,187	16
Tennessee‡	2.4*	263*	31	10,799	24	11,062	21
Oregon‡	2.4*	191*	32	7,859	30	8,050	31
Dist. of Columbia	2.8*	83*	33	2,857	43	2,940	43
Nevada	3.6*	43*	34	1,167	49	1,210	49
Washington‡	4.2*	444*	35	10,222	26	10,666	23
Iowa‡	4.2*	550*	36	12,449	19	12,999	17
Minnesota‡	4.2*	589*	37	13,555	15	14,144	15
Missouri	4.8*	972*	38	19,170	8	20,142	8
Ohio	5.3*	1,588*	39	28,440	6	30,028	6
New Hampshire	5.4*	174*	40	3,022	42	3,196	41
Connecticut	5.7*	473*	41	7,767	31	8,240	30
Pennsylvania	6.6*	2,769*	42	39,150	3	41,919	1
Colorado	7.1*	649*	43	8,411	29	9,060	29
Utah	7.6*	273*	44	3,298	40	3,571	39
Indiana	8.7*	1,758*	45	18,269	10	20,027	11
Idaho	9.8*	485*	46	4,454	38	4,939	37
South Dakota	10.2*	303*	47	2,659	45	2,962	42
Nebraska	11.3*	794*	48	6,202	34	6,996	33
Montana	15.0*	886*	49	5,044	37	5,930	35
TOTAL	1.1	6,605		618,249		611,644	

*Loss. ‡Tied. †Estimated by A. N.

Who's Who

(Continued from Page 67)

mouldings, fans and mufflers. C. B. Hayes, pres, gen. mgr.; Charles Holerith, vice pres., engr.; E. C. Hetherwick, secy.-treas.; R. J. Welihan, sales mgr.; J. H. Hickey, pur. agt.

HAYNES STELLITE CO., Harrison and Lindsay sts., Kokomo, Ind. Alloys, bits, blades, bushings, castings, drills, pivots, valve seats, rods, tools, etc.

HAZARD WIRE ROPE DIV. American Chain & Cable Co., Inc., Wilkes-Barre, Pa. Cable. W. B. Lashar, chrm.; W. T. Morris, pres.; W. F. Wheeler, A. P. Van Schaick, C. G. Williams and G. C. Moon, vice-pres.; W. M. Wheeler, secy.; J. O. Lashar, adv. mgr.; G. C. Moon, sales mgr. **Adv. Agcy.**—Reincke-Ellis-Younggreen & Finn, 520 North Michigan ave., Chicago, Ill.

HEIL CO., 3000 W. Montana st., Milwaukee, Wis. Hydraulic dump units, compartment tanks, dehydrators, etc. Julius P. Heil, pres., gen. mgr.; Joseph F. Heil, vice-pres., sales mgr.; Wm. M. Chester, vice-pres.; Harold Falk, vice-pres.; Wm. M. Chester, secy.; H. F. Pugh, adv. mgr.; C. E. Eisenberg, engr. of hoist and body div.; Clarence Heil, pur. agt. **Det. Rep.**—Heil Co., 1831 Clay ave. **Adv. Agcy.**—Editorial Service Co., Milwaukee, Wis.

HEIN-WERNER MOTOR PARTS CORP., 1200 National ave., Waukesha, Wis. Hydraulic jacks, oil and water pumps, industrial clutches. G. G. Hein, pres., gen. mgr.; M. A. Hadcock, vice-pres.; H. J. Frame, secy.; E. R. Estberg, treas.; D. J. Byrnes, sales mgr.; Arthur Mogge, adv. mgr.; Robert Statz, engr.; John Mintzlaff and Milton Schley, pur. agts. **Det. Rep.**—W. M. Hamilton, 22612 Beech st., Dearborn, Mich. **Adv. Agcy.**—Arthur R. Mogge, 307 North Michigan ave., Chicago, Ill.

HELLER BROS. CO., Newcomerstown, O. Files, hammers, rasps, etc. M. Alfred Heller, gen. mgr.

HENDRICKSON MOTOR TRUCK CO., 3538 S. Wabash ave., Chicago, Ill. Trucks, repair work, trailer axle units. M. Hendrickson, chmn.; R. T. Hendrickson, pres., eng.; G. W. Hendrickson, vice-pres.; E. D. Hendrickson, sales mgr.; adv. mgr.; C. R. Hendrickson, treas., pur. agt.

HENNEY MOTOR CO., Chicago and Spring sts., Freeport, Ill. Funeral cars, ambulances, airport buses, specialized motor vehicles. John W. Henney, pres., gen. mgr.; J. H. Smithe, vice-pres., treas.; C. Roy Clough, vice-pres., sales mgr. adv. mgr.; Chas. H. Green, secy.; Walter T. Jacobs, engr.; C. W. Stoffragen, pur. agt. **Det. Rep.**—Chas. E. Mack, 808 W. Forest ave. **Adv. Agcy.**—Midwest Advertising Agency, Rockford, Ill.

HENRY & ALLEN, Inc., 2-36 Wadsworth st., Auburn, N. Y. Drop forging, wrenches, tin snips, hammers. E. H. Van Order, vice-pres., pur. agt.; Earl McQueeney, secy.; Samuel Feldman, treas.; I. Ridley, B. Tidd, sales mgrs.. **Det. Rep.**—Russel Mathews, 7310 Woodward ave.

HENRY FORGE & TOOL, Inc., 89 York st., Auburn, N. Y. Drop forgings. Samuel Schwartz, pres.; Herman Schwartz, vice-pres.; Charles J. Lane, vice-pres., gen. mgr.; Maurice Schwartz, secy.-treas.; L. W. Golley, pur. agt.; P. A. Henry, supt. **Det. Rep.**—H. Glenn Johnston, 12-216 General Motors bldg.

HENRY & WRIGHT MFG. CO., 760 Windsor st., Hartford, Conn. Dieing machines, steel presses, sensitive drilling machines. F. K. Simmons, pres.; J. J. Horan, pur. agt.; H. H. Hilliard, treas. **Det. Rep.**—E. W. Slocum, room 233, 2842 W. Grand blvd. **Adv. Agcy.**—Richard Thorndike, 111 Westminister st., Providence, R. I.

HERBRAND CORP., Cor. Stone and Lake sts., Fremont, O. Drop forged steel parts and hand tools. Edward H. Schwab, chrm.; Stanley S. Boyer, pres., gen. mgr.; Richard O. Mead, vice-pres.; C. Traub Gottron, secy.-treas.; Arthur C. Gropp, sales mgr., adv. mgr.; Merton M. Kittle, engr.; Frank D. Betts, pur. agt.; Eugene A. Heschel, gen. supt. **Det. Rep.**—Richard O. Mead, 11-252 General Motors bldg. **Adv. Agcy.**—Arthur R. Mogge, Chicago, Ill.

HERCULES BODY CO., 1501 W. Franklin st., Evansville, Ind. Station wagons, packer bodies, panels, service bodies, platform stake bodies. G. K. Specht, pres.; E. S. Seibert, engr.; H. F. Pretz, pur. agt.; George M. Specht, spec. rep. **Det. Rep.** — Henry Morris, 11-170 General Motors bldg.

HERCULES MOTORS CORP., 201 Eleventh st., S. E. Canton, O. Internal combustion engines and power units. Gordon M. Mather, chrm.; Charles Balough, pres., gen. mgr.; John Keplinger, vice-pres. in chge. of sales; C. P. Weeks, vice-pres. in chge. of fgn. sales; H. G. Smith, engr.; R. C. Wietersen, pur. agt.; H. P. Blake, secy.

HERCULES STEEL PRODUCTS CO., Galion, O. L. M. Liggett, pres., treas.; E. P. Monroe, secy.; H. L. Ekin, sales mgr.; G. C. McClure, adv. mgr., pur. agt.; F. Biszantz, engr. **Det. Rep.**—Howard Einstein, Henry C. Morris. **Adv. Agcy.**—Coleman Todd Assoc., Mansfield, O.

HERRON ZIMMERS MOULDING CO., 3900 E. Outer Drive, Detroit, Mich. Metal mouldings. O. L. Herron, pres.; R. C. Schemmel, vice-pres.; D. Herron, secy.; J. B. Zimmers, treas., pur. agt.; O. J. Crowe, gen. mgr., sales mgr., adv. mgr.; C. T. Singelyn, engr. **Det. Rep.**—R. Spinning Co.

HIGHWAY PULLMAN CO., Ltd., 2005 W. 48th st., Los Angeles, Caalif. House and display trailers Donald Marley, owner and gen. mgr.; P. B. Treat, sales and adv. mgr.; H. Toombs, engr.; F. B. Kimball, pur. agt.

HINCKLEY MYERS CO., Jackson, Mich. Automotive tools and equipment. E. P. Wandel, pres., gen. mgr.; J. E. Moore, vice-pres.; A. E. Price, vice-pres. F. C. Bowles, secy.-treas; B. C. Hinckley, sales mgr.; I. Gibbs, pur. agt.

HINDE & DAUCH PAPER CO., Decatur and Adams sts., Sandusky, O. Insulation, trim materials. Sidney Frohman, pres. and gen. mgr.; P. G. Klotz, vice-pres.; J. W. Harbrecht, vice-pres.; J. H. Macleod, vice-pres. and sales mgr.; W. F. Pfeiffer, secy.-treas.; P. C. Meelfeld, adv. mgr.; C. N. Kiefer, pur. agt. **Adv. Agcy.**—Howard Swink Advertising Agency, 336 E. Church st., Marion, O.

HINSON MANUFACTURING CO., Westfield and Menges sts., Waterloo, Ia. Textile automotive products. Clyde Hinson, chmn. and pres.; Paul J. Herzberg, vice-pres. and sales mgr.; Ben Wengard, vice-pres. and pur. agt.; Russell Degon, secy. **Det. Rep.**—E. C. Reamer, Fort Shelby Hotel. **Adv. Agcy.**—Stewart Simmons Co., Waterloo, Ia.

HOBART BROTHERS CO., Hobart Square, Troy, O. Automatic air compressors, arc welders, battery chargers, portable paint spray, motor generator sets. E. A. Hobart, pres.; W. H. Hobart, vice-pres.; E. C. Galbreath, gen. and sales mgr.; C. K. Priest, adv. mgr.; R. Flora, engineer; B. A. Lutz, pur. agt. **Det. Rep.**—Roy Smith, Hobart Equip. Co., 5257 Trumbull ave. **Adv. Agcy.**—R. W. Dalton & Associates, Troy, O.

HOBBS MFG. CO., 609 N. Main st., Fort Worth, Tex. Heavy duty semi-trailers, four-wheel trailers, pole trailers, truck and trailer bodies. M. J. Neeley, pres. and gen. mgr.; W. E. Grace, sales mgr. and secy.; R. P. Akey, engr. and pur. agt.

HODELL CHAIN CO., 3900 Cooper ave., Cleveland, O. Tire chains, chain pliers and adjusters, repair tools, radiator fill faucets. F. G. Hodell, pres.; F. A. Olmstead, vice-pres.; Lee A. Chilcote, secy.; J. D. Anderson, Jr., treas.; V. J. Rumpler, sales mgr.; M. A. Reber, pur. agt.

HODES-ZINK MFG. CO., Lynn st., Fremont, O. Seat covers and pads, mechanic covers, tire covers, transfers, name plates, advertising novelties, trimming supplies, rubber and felt floor mats, winter fronts. H. E. Zink, pres. and gen. mgr.; A. H. Miller, vice-pres.; J. Meredith Miller, treas.; W. A. Zink, sales mgr. and secy.; C. F. Dahlhofer, adv. mgr.; C. Cole, pur. agt.; C. M. Werling, mgr., Passaic (N. J.) branch. **Det. Rep.**—E. J. Hough, 3391 Sherbourne road.

HOLCROFT & CO., 6545 Epworth blvd., Detroit, Mich. Furnaces of all types. C. T. Holcroft, pres.; W. H. Holcroft, vice-pres.; R. T. Cadwell, secy.-treas.

HOLLEY CARBURETOR CO., Vancouver & P. M. R. R., Detroit, Mich. Carburetors and automotive accessories, gasoline pumps. Geo. M. Holley, chmn.; Earl Holley, pres. and treas.; D. W. Candler, vice-pres. and gen. mgr.; M. C. Carpenter, vice-pres.; J. F. English, secy.; R. J. Haggith, asst. treas.; H. S. Crawford, sales mgr.; H. C. Webb, pur. agt.

R. M. HOLLINGSHEAD CORP., 840 Cooper st., Camden, N. J. Polishes, waxes, top dressings, oils, lubricants, tire coatings, brake fluids, solders, flush. R. M. Hollingshead, Sr., pres.; R. M. Bagley, vice-pres.; Stewart Hollingshead, vice-pres.-sales, R. M. Hollingshead, Jr., vice-pres.-mfg.; Dorothy E. Butler, secy.; Frederick G. Mitten, adv. mgr.; Ben Elfreth, engr.; L. A. Thompson, pur. agt. **Adv. Agcy.**—Lamb Agency, Land Title bldg., Philadelphia, Pa.

HOLMES, ERNEST CO., 2505 E. 43rd st., Chattanooga, Tenn. Wreckers and towing equipment, metal spray guns, replacement battery boxes, steel creepers, spring alignment clamps. Ernest W. Holmes, pres. and gen. mgr.; Ernest W. Holmes, Jr., vice-pres. and engr.; S. B. Strang, secy.; L. Millsaps, treas.; C. C. Shackleford, sales mgr.; Julian Delaperriere, adv. mgr.; F. T. Russey, pur. agt. **Adv. Agcy.** — Acme Advertising Agency, 125½ Luckie st., Atlanta, Ga.

HOMER FURNACE & FOUNDRY CORP., S. Clay st., Coldwater, Mich. Cylinder heads, housings, clutch and flywheel, water pumps and impeller sets, starter housings and small replacement castings. R. W. Strong, pres.; W. J. Carlyle, gen. mgr. and treas.; D. W. Blanc, sales mgr.

HOOF PRODUCTS CO., 162 N. Franklin st., Chicago, Ill. Governors, timing gears, metal timing gears, valve guides, valve lifter parts, steering stabilizers. A. C. Hoof, pres. and gen. mgr.; H. C. Kepner, vice-pres. and sales mgr.; Walter Eckert, secy.; A. Altenberg and C. B. Seymour, engrs. **Det. Rep.**—N. W. Eveleth, 4809 John R. st. **Adv. Agcy.**—Russell T. Gray., Inc., Chicago, Ill.

HOOPES, BRO. & DARLINGTON, Inc., E. Market st. and P. R. R., West Chester, Pa. Wheels and parts, special welded and fabricated special purpose vehicles. C. R. Hoopes, pres.; M. Hoopes, vice-pres.; H. B. Coleman, secy.; Thos. Hoopes, Jr., treas.; J. W. Bates, gen. mgr.; P. W. Watson, engr.; K. A. Smith, pur. agt.

HOOSIER BRAKE LINING CORP., 705 W. Main st., North Manchester, Ind. Molded brake lining. D. B. DeLancey, pres. and sales mgr.; R. M. DeLancey, vice-pres.; C. B. DeLancey, gen. mgr. and secy.-treas.

HOOVER BALL & BEARING CO., Ann Arbor, Mich. Ball bearings, roller bearings. W. C. Mack, chmn. and pres.; C. W. Lighthall, vice-pres. and gen. mgr.; W. J. Arnold, secy.; W. E. Watrous, treas.; F. H. Lennox, sales mgr. and adv. mgr.; T. Pew, engr.; B. Reynolds, pur. agt. **Det. Rep.**—H. S. Tucker, 2015 Seward ave. **Adv. Agcy.**—Jagua Co., Grand Rapids, Mich.

(Continued on Page 71)

Performance Specifications For 1938 Passenger Cars (and other recent models)

EVERY MODERN CAR offers three grades of performance.

That's because the farther you advance the spark of a high compression engine, up to the point of maximum efficiency, the more power you get from gasoline.

But the motor "knocks" or "pings" when the spark is set farther ahead than the "anti-knock" quality of the gasoline being used permits.

Judged by anti-knock quality, there are *three* grades of gasoline: "low grade," "regular" and gasoline containing "Ethyl."

Every car has a device—variously called "Octane Selector," "distributor adjuster," etc.—for setting the spark for each of these three grades of gasoline.

AND THE PERFORMANCE OF A CAR DEPENDS UPON THE GRADE OF GAS, AS SHOWN IN THE SPECIFICATIONS BELOW*

*

YOU HAVE THESE 3 CHOICES!

Poor performance with "low grade" gasoline

There is no anti-knock fluid (containing tetraethyl lead) in "low grade" gasoline. Power is lost because the spark must be retarded to prevent "knock" or "ping."

Good performance with "regular" gasoline

Most regular gasoline has in it anti-knock fluid (containing tetraethyl lead). The spark can be considerably advanced for more power without "knock" or "ping."

Best performance with gasoline containing "ETHYL"

Gasoline "with ETHYL" is highest in all-round quality. It has *enough* anti-knock fluid (containing tetraethyl lead) so that the spark can be *fully* advanced for maximum power and economy without "knock" or "ping."

ETHYL GASOLINE CORPORATION, *manufacturer of anti-knock fluids used by oil companies to improve gasoline*

AN's Adjusted Production Estimate, Makes and Months, 1937

Following are the monthly production estimates compiled from the figures appearing in Automotive News. Compared with the official U. S. department of commerce totals for each month, announced several weeks after completion of each month, AN's estimates (which are made each week in advance) have been more than 98 per cent correct. Following are AN's estimates for the 12 months of 1937, for U. S. and Canada only, adjusted to the official government figures for each month, since the U.. S. totals do not show production of individual manufacturers:

MAKE	Jan.	Feb.	Mar.	First Quarter	April	May	June	First Half	July	Aug.	Sept.	Third Quarter	Oct.	Nov.	Dec.	Fourth Quarter	1937 Total
GENERAL MOTORS	65,875	74,569	239,980	377,424	229,792	219,792	193,988	1,019,336	211,914	155,660	68,769	436,343	163,393	186,885	114,564	464,841	1,924,305
†Chevrolet	38,000	49,431	147,100	224,531	143,500	136,100	106,154	620,285	133,000	114,000	29,000	276,000	94,673	120,800	78,021	293,494	1,189,779
Pontiac	11,007	7,257	32,009	50,273	26,237	27,950	29,989	134,449	31,047	18,208	11,655	60,910	20,153	15,222	8,619	43,994	239,353
Buick	5,200	7,162	27,791	40,153	25,735	23,219	23,544	112,651	23,932	11,839	16,264	52,035	25,902	25,025	17,037	67,962	232,648
Oldsmobile	10,700	9,130	26,880	46,710	28,155	26,329	28,605	129,799	18,755	10,605	10,790	40,150	18,625	20,237	8,978	47,840	217,789
Cadillac-LaSalle	968	1,589	6,200	8,757	5,505	6,194	5,480	25,936	5,180	1,008	1,060	7,248	4,040	5,601	1,911	11,552	44,736
FORD	128,020	105,134	138,716	366,870	130,110	121,400	118,986	742,366	56,684	95,471	51,420	203,575	8,396	28,382	147,910	185,607	1,130,619
†Ford	124,400	101,869	135,201	361,470	126,700	118,000	115,250	721,420	53,214	93,340	49,660	196,214	7,719	26,381	144,250	179,269	1,095,984
Lincoln-Zephyr	3,500	3,135	3,390	10,025	3,280	3,273	3,601	20,179	3,350	2,041	1,720	7,111	590	1,870	3,502	5,962	33,252
Lincoln	120	130	125	375	130	127	135	767	120	90	40	250	87	131	158	376	1,393
CHRYSLER	125,734	128,600	62,154	316,488	108,400	123,826	124,314	672,812	110,544	104,900	17,990	233,434	88,300	88,380	43,850	220,530	1,124,992
†Plymouth	62,300	60,000	28,700	151,000	48,000	59,426	59,100	317,526	49,850	47,300	8,990	106,140	41,300	43,000	21,100	105,400	526,066
†Dodge	39,600	44,000	20,850	104,450	35,700	41,700	44,136	225,986	40,700	38,700	5,640	85,040	27,000	27,400	14,200	68,600	379,626
Chrysler	15,100	15,000	6,704	36,804	15,600	12,400	11,887	76,474	10,440	10,600	1,840	22,880	11,560	10,180	4,950	26,690	126,260
De Soto	8,734	9,600	5,900	24,234	9,100	10,300	9,192	52,826	9,554	8,300	1,520	19,374	8,440	7,800	3,600	19,840	92,040
PACKARD	11,200	12,750	15,140	39,090	11,520	13,063	9,120	72,793	5,780	‡	3,640	9,420	9,640	11,260	5,440	26,340	108,553
†HUDSON	12,667	10,190	3,244	26,101	8,612	12,450	11,822	58,985	8,701	6,094	1,700	16,495	13,537	9,725	3,620	26,882	102,362
†STUDEBAKER	9,292	9,270	8,062	26,624	8,704	7,697	10,001	53,026	7,995	1,874	10,089	19,958	9,140	5,155	4,038	18,333	91,317
NASH	8,662	10,039	10,918	29,619	10,110	9,306	8,440	57,475	6,676	‡	1,700	8,376	7,791	10,641	3,704	22,136	87,987
†WILLYS	6,305	7,798	9,717	23,820	8,856	8,343	6,601	47,620	6,840	5,050	1,950	13,840	6,782	4,077	1,609	12,468	73,928
GRAHAM	1,765	1,675	2,425	5,865	2,425	1,340	1,027	10,657	1,344	1,408	762	3,514	‡	815	2,328	3,143	17,314
CORD	218	175	167	560	161	160	169	1,050	174	115	.....	289	.....	.....	.....	.....	1,339
HUPMOBILE	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	507	130	637	637
†MISCELLANEOUS	29,900	23,502	28,655	82,057	35,390	23,000	35,900	176,347	40,260	34,500	17,600	92,360	31,000	30,802	19,693	81,495	350,202
†TOTAL	399,638	383,702	519,178	1,302,518	553,420	540,377	521,152	2,917,467	456,912	405,072	175,620	1,037,604	337,979	376,629	346,886	1,061,494	5,016,565

†Includes Trucks. ‡Closed for Inventory.

Copyright 1938. Not to be reprinted without permission.

Adjusted Production Estimates by Makes and Months, 1936

The following production estimates have been adjusted to conform with the official Census Bureau monthly figures and are based on weekly estimates which appeared in Automotive News. In making these adjustments, AN has revised individual figures so that the monthly totals for the industry conform to Census Bureau reports. The yearly total of individual makes, however, may show some discrepancy with actual figures, but such variations do not amount to more than 1 or 2 per cent either way. Actual production figures of individual makers are not available. Automotive News believes these figures may be considered correct for all practical purposes.

MAKE	January	February	March	1st Quarter	April	May	June	2nd Quarter	1st Half	July	August	September	3rd Quarter	October	November	December	4th Quarter	1936 Total
Chevrolet†	102,193	95,593	127,598	325,384	143,315	135,319	143,423	422,057	747,441	138,925	114,500	.....	253,425	46,000	110,219	128,253	284,472	1,285,338
Ford†	96,200	86,000	120,800	303,000	128,100	109,734	109,000	346,834	649,834	112,479	69,200	88,600	270,279	14,681	68,256	129,000	211,937	1,132,050
Plymouth	47,100	27,500	47,145	121,745	51,380	49,500	46,200	147,080	268,825	48,100	30,000	4,200	82,300	41,300	47,500	49,350	138,150	489,275
Dodge†	26,250	12,700	24,340	63,290	39,180	37,820	38,850	115,850	179,140	40,850	28,050	8,400	77,300	18,800	28,000	33,675	80,475	336,915
Buick	13,458	9,198	14,352	37,008	19,578	18,901	16,790	55,269	92,277	12,126	650	5,014	17,790	17,667	22,503	30,000	70,170	180,237
Oldsmobile	16,826	11,842	18,363	47,031	26,057	23,832	22,506	72,395	119,426	19,914	900	.....	20,814	5,700	17,600	25,180	48,480	188,720
Pontiac	11,722	8,996	14,962	35,680	22,459	21,852	19,539	63,850	99,530	17,849	850	.....	18,699	12,930	21,538	24,861	59,329	177,558
Hudson-Terraplane†	10,651	7,152	12,519	30,322	15,021	12,642	11,240	38,903	69,225	9,700	7,125	400	17,225	9,983	15,001	16,292	41,276	127,726
Studebaker†	6,121	5,143	9,247	20,511	10,134	8,909	6,586	25,629	46,140	405	2,793	11,274	14,472	12,034	9,313	8,119	29,466	90,078
Packard	5,136	4,574	6,869	16,579	8,269	6,677	5,993	20,939	37,518	4,950	2,200	9,231	16,381	12,800	9,053	12,000	33,853	87,752
Chrysler	5,920	3,545	5,167	14,632	7,325	6,140	5,840	19,305	33,937	5,020	1,750	.....	6,770	6,000	9,200	7,970	23,170	63,877
Nash-LaFayette	4,399	2,832	5,943	13,174	8,532	7,440	5,022	20,994	34,168	3,641	827	1,900	6,368	5,980	7,612	9,220	22,812	63,348
DeSoto	5,900	3,136	4,341	13,377	5,519	4,635	4,620	14,774	28,151	4,480	1,550	.....	6,030	6,000	8,120	7,050	21,170	55,351
Cadillac	2,340	1,744	2,582	6,666	2,823	2,232	2,085	7,140	13,806	1,640	250	.....	1,890	1,250	5,007	6,000	12,257	27,953
Graham	2,035	1,323	2,142	5,500	3,218	3,005	2,240	8,463	13,963	2,039	734	210	2,983	2,650	2,600	1,975	7,225	24,171
Willys†	2,217	1,380	.....	3,597	3,127	3,103	3,306	9,536	13,133	2,724	3,140	192	6,056	.....	550	5,155	5,705	24,894
Reo‡	1,438	1,816	1,466	4,720	1,821	1,720	1,555	5,096	9,816	1,292	1,062	964	3,318	464	.....	.....	464	13,598
Auburn-Cord	.....	.....	740	740	768	710	660	2,138	2,878	540	170	.....	710	50	190	190	430	4,018
Miscellaneous†	17,400	16,400	20,416	54,216	31,100	26,400	23,900	81,400	135,616	24,800	10,200	9,400	44,400	15,700	23,440	24,842	63,982	243,998
Total	**377,306**	**300,874**	**438,992**	**1,117,172**	**527,726**	**480,571**	**469,355**	**1,477,652**	**2,594,824**	**451,474**	**275,951**	**139,785**	**867,210**	**229,989**	**405,702**	**519,132**	**1,154,823**	**4,616,857**

†Includes trucks.
‡Stopped passenger car production in November to produce trucks only.

(Copyright, 1937. Not to be reprinted without permission.)

Adjusted Production Estimates, Six Months, 1938

	Jan.	Feb.	March	First Quarter	April	May	June	2nd Quarter	First Half
Chevrolet†	57,000	54,875	71,960	183,835	61,445	48,500	48,729	158,674	342,509
Ford†	83,493	58,900	37,780	180,173	55,100	50,650	46,900	152,650	332,823
Plymouth†	10,030	13,400	23,900	47,330	21,800	24,200	20,400	66,400	113,730
Dodge†	7,695	10,789	20,500	38,984	19,100	9,953	10,500	39,553	78,537
Buick	12,912	10,806	11,561	35,279	11,992	15,130	13,051	40,173	75,452
Oldsmobile	7,563	6,016	6,638	20,217	6,077	6,543	6,410	19,030	39,247
Pontiac	5,006	3,870	7,173	16,049	6,548	6,726	5,956	19,230	35,279
Chrysler	4,300	4,200	6,350	14,850	6,600	6,300	3,100	16,000	30,850
Packard	5,105	4,016	5,722	14,843	4,285	4,550	3,150	11,985	26,828
Hudson†	6,728	4,568	4,103	15,399	3,905	3,750	2,130	9,785	25,184
De Soto	2,375	2,850	5,050	10,275	5,900	5,225	2,025	13,150	23,425
Studebaker†	2,332	3,058	4,189	9,579	4,224	3,034	2,985	10,243	19,822
Nash	2,626	2,820	3,198	8,644	2,668	1,892	2,622	7,182	15,826
Cadillac-La Salle	2,240	1,685	2,525	6,450	1,920	2,075	1,725	5,720	12,170
Lincoln	2,612	2,278	2,190	7,080	2,115	1,530	1,387	5,032	12,112
Willys†	‡	1,599	2,961	4,560	2,295	735	177	3,207	7,767
Bantam†	515	474	600	1,589	323	40	‡	363	1,952
Graham	638	‡	224	862	336	‡	500	836	1,698
Hupmobile	60	185	20	265	‡	‡	‡	‡	265
Miscellaneous†	13,900	16,200	21,954	52,054	21,500	19,350	17,652	58,502	110,556
TOTAL†	**227,130**	**202,589**	**238,598**	**668,317**	**238,133**	**210,183**	**189,399**	**637,715**	**1,306,032**

†Includes trucks. ‡Closed.

(Copyright 1938. Not to be reprinted without permission).

Annual Percentage Change in Production

(United States and Canada)

Year	Passenger Cars	Motor Trucks	Total	Year	Passenger Cars	Motor Trucks	Total
1920	15.0%	16.6%	15.1%	1929	19.5%	40.4%	22.2%
1921	—19.7%	—52.3%	—24.4%	1930	—39.3%	—27.4%	—37.6%
1922	55.0%	81.0%	57.2%	1931	—29.9%	—27.6%	—29.6%
1923	58.4%	53.9%	58.0%	1932	—41.8%	—43.5%	—42.1%
1924	—12.0%	1.8%	—10.6%	1933	+37.2%	+46.2%	+38.7%
1925	17.2%	28.3%	18.5%	1934	+39.5%	+67.2%	+44.5%
1926	2.0%	—0.04%	1.8%	1935	49.1%	22.2%	43.6%
1927	—21.9%	—10.7%	—20.5%	1936	12.3%	1.05%	12.1%
1928	30.1%	18.5%	28.5%	1937	7.1%	15.8%	8.7%

(—) means decrease.

(Compiled by Automobile Manufacturers Assn.)

Monthly Sales Index of Shipments by N. S. P. A. Manufacturers

(Average Monthly Sales 1934 = 100)

N. S. P. A. AUTOMOTIVE INDEX

	1934=100			1935=114			1936=135			1937=143		
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1934	86	93	114	118	119	115	101	104	87	91	90	75
1935	96	95	115	127	121	114	117	117	121	130	112	103
1936	116	118	134	147	138	152	139	140	139	136	134	128
1937	130	137	147	156	159	154	131	149	151	152	135	114

REPLACEMENT PARTS SHIPPED TO WHOLESALERS

	1934=100			1935=103			1936=124			1937=122		
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1934	83	85	101	115	117	116	104	109	99	104	98	69
1935	84	82	103	115	120	112	114	112	110	109	89	86
1936	88	101	119	133	127	148	128	138	141	133	121	112
1937	112	112	129	134	127	128	120	131	132	130	115	96

SERVICE EQUIPMENT AND TOOLS SHIPPED TO WHOLESALERS

	1934=100			1935=118			1936=133			1937—146		
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1934	91	92	128	127	129	115	94	102	81	88	76	71
1935	93	101	120	122	110	107	121	137	147	137	121	106
1936	113	128	150	153	140	143	144	146	136	137	109	100
1937	113	127	142	166	160	176	145	161	166	156	140	107

ORIGINAL EQUIPMENT SHIPPED TO VEHICLE MANUFACTURERS

	1934=100			1935=146			1936=186			1937=248		
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1934	93	120	147	125	116	114	100	91	54	50	77	99
1935	136	133	154	171	136	126	126	112	132	179	194	175
1936	217	190	181	190	172	174	172	142	148	182	223	246
1937	250	255	258	310	315	285	204	215	236	242	208	206

EXPORT SHIPMENTS

	1935=96					1936=99			1937=128			
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1935	91	79	101	84	102	94	101	102	92	98	100	107
1936	89	79	103	108	98	95	103	94	96	112	89	118
1937	92	111	140	135	151	140	123	129	142	124	124	130

Who's Who

(Continued from Page 69)

HOUDE ENGINEERING CORP., 537 E. Delavan ave., Buffalo, N. Y. Shock absorbers, precision machined products, electrical hydrogen welding of ferrous and non-ferrous metals, hot air heaters, piston pins, bearings, water pumps, industrial hydraulic pumps, automatic transmission shifters. Charles Getler, pres.; Ralph F. Peo, vice-pres. and gen. mgr.; Melville C. Mason, secy.; George C. Phelps, treas.; Edward L. Valance, sales mgr.; S. C. Bliss, engr.; George C. Kratzer, pur. agt. **Det. Rep.**—John Sullivan, 2240 E. Grand blvd. **Adv. Agcy.**—Baldwin & Strachan, Inc., 374 Delaware ave., Buffalo, N. Y.

HOUGHTON, E. F. & CO., 240 W. Somerset st., Philadelphia, Pa. Leather belts, leather packings, industrial lubricants, metal working and heat treating products. A. E. Carpenter, pres. and gen. mgr.; G. W. Pressell, exec. vice-pres.; R. H. Patch, 2nd vice-pres. and treas.; E. A. Carpenter, secy.; C. G. Schultze, asst. gen. sales mgr.; D. C. Miner, adv. mgr.; W. A. Bohne, plant engr.; H. B. Fox, pur. agt. **Det. Rep.**—H. E. Martin, E. F. Houghton & Co., Lumpkin ave. and Det. Terminal R. R.

HOWELL ELECTRIC MOTORS CO., Howell, Mich. Electric motors. A. C. Flood, pres. and treas.; N. S. Yost, vice-pres. and engr.; R. B. McPherson, vice-pres.; H. T. Proctor, secy.; C. H. Pasmore, sales mgr.; L. J. Pettibone, pur. agt. **Det. Rep.**—Howell Electric Motors Co., 606 Stephenson bldg.

HUBBARD, M. D. SPRING CO., 310 Central, Pontiac, Mich. Coil and flat springs, wire forms, clips, stampings, cotter pins, washers, expansion plugs. M. D. Hubbard, pres.; M. H. Craig, vice-pres.; J. A. Hubbard, secy., sales mgr., adv. mgr.; P. M. Hubbard, pur. agt. **Adv. Agcy.**—S. E. Schneider, 1599 Pennsylvania ave., Detroit, Mich.

HUDSON MOTOR CAR CO., 12601 E. Jefferson ave., Detroit, Mich. Motor cars and commercial units. A. E. Barit, pres. and gen. mgr.; S. G. Baits, vice-pres. and asst. gen. mgr.; W. R. Tracy, vice-pres. in charge of sales; C. A. Oostdyk, vice-pres. in charge of purchasing; C. D. Sterling, secy.; A. Hood, treas.; W. A. James, adv. mgr. **Det. Rep.**—Aaron DeRoy Motor Car Co., 4444 Cass ave. **Adv. Agcy.**—Brooke, Smith & French, Inc., 82 E. Hancock st., Detroit, Mich.
(See display advertising index)

HUFFMAN MFG. CO., Davis and Gilbert ave., Dayton, O. Battery servicers, blow torches, creepers, funnels, gasoline cans, gasoline price signs, heat guns, drain pans, gear cleaners, gear flushers, hypoid lubricators, lift drains, oil bottles, canned oil dispensers, display racks, oil drainers, oil measures, oilers, pails, alcohol dispensers, funnel measures, radiator fillers, tire spreaders, tube test tanks, vacuum cleaners, waste cans. H. M. Huffman, pres.; John W. Clements, vice-pres.; John H. Horstman, secy. and pur. agt.; E. H. Shell, treas.; H. M. Huffman, Jr., sales mgr. **Det. Rep.**—R. S. Staples Co., 8-255 General Motors bldg. **Adv. Agcy.**—Keeling & Co., Chamber of Commerce bldg., Indianapolis, Ind.

HUGHES KEENAN CO., Wayne and Newman sts., Mansfield, O. Steel dump bodies, cranes, iron mules, post hole diggers, stairs and structural iron. Arthur S. Hughes, gen. mgr.; W. E. Post, sales and adv. mgr.; W. H. Martin, engr.; O. F. Schaller, pur. agt. **Adv. Agcy.**—Carr Liggett, Cleveland, O.

HUPP MOTOR CAR CORP., 3641 E. Milwaukee ave., Detroit, Mich. Motor cars. Thomas Bradley, pres. and gen. mgr.; W. A. MacDonald, vice-pres. and director of sales; Frank Watts, vice-pres. and chief engr.; John Cotter, secy.-treas.; J. R. Ackerman, sales mgr. **Det. Rep.**—Hupmobile Michigan Sales Corp., 5850 Cass ave. **Adv. Agcy.**—Grace & Bement, Inc., 435 New Center bldg., Detroit, Mich.

HURD LOCK & MFG. CO., Almont and Adrian, Mich. Locking devices, hub caps, mouldings, trim and ornaments, hand brake lever extensions. E. P. Hurd, pres. and gen. mgr.; P. W. Mulder, vice-pres.; Chas. D. Ferguson, secy.-treas.; H. F. Dies, engr.; E. A. Gump, pur. agt. **Det. Rep.**—Hurd Lock & Mfg. Co., 2184 E. Grand blvd.

HYATT BEARINGS DIV., General Motors Corp., Harrison, N. J. Roller bearings. H. O. K. Meister, gen. mgr.; H. K. Porter, gen. sales mgr.; H. M. Carroll, adv. mgr.; O. W. Young, chief engr.; F. A. Weiss, pur. agt.; C. P. Millard, factory mgr.; M. A. Moore, comptroller. **Det. Rep.**—F. E. Booth, General Motors bldg. **Adv. Agcy.**—Campbell Ewald Co., New York, N. Y.

HYDRAULIC BRAKE CO., 84 W. Hancock ave., Detroit, Mich. Hydraulic brakes. D. O. Scott, pres. and gen. mgr., sales and adv. mgr.; E. F. Loweke, engr.; B. Ballard, pur. agt.

HYGENIA BRUSH CO., 9 May st., Worcester, Mass. Brushes, brooms, mops of all types. Harry Smith, gen. mgr.; E. C. Camp, sales mgr. **Det. Rep.**—C. D. Pettingell, 1603 S. Michigan ave., Chicago, Ill.

HYGRADE PRODUCTS CO., 516 W. 34th st., New York, N. Y. Fuel pump, carburetor, speedometer and shock absorber replacement parts, flexible fuel lines, temperature gauge repair parts. Chas. Zimmer, pres.; C. Segor, sales mgr.; Reuben Hanser, credit mgr. **Det. Rep.**—A. J. Taylor, Milford, Mich. **Adv. Agcy.**—Walter Scott Adv. Agcy., New York, N. Y.

HYMAN, S. E. CO., Fremont, O. Seat covers, cushions, pads, replacement mats, insect screens, winter radiator grille fronts. S. E. Hyman, pres. **Det. Rep.**—J. B. Fetterman, Cleveland, O.

HYVIS OILS, Inc., 746-60 Market st., Warren, Pa. Mileage metered motor oils and lubricants. Harry R. Lewis, pres.; T. M. Demarest, secy.-treas.; C. L. McCarty, asst. secy. and treas.; C. D. Wood, gen. mgr.; L. N. Donaldson, adv. mgr.; Paul Broderick, pur. agt.; R. E. Dunham, technical dir. **Det. Rep.**—D. W. Burgess, 12723 Littlefield. **Adv. Agcy.**—Aitkin Kynett Co., 1400 S. Penn Square, Philadelphia, Pa.

I

IDEAL CLAMP MFG. CO., Inc., 200 Bradford st., Brooklyn, N. Y. Automotive products. Phil Rauch, gen. mgr. and secy.; Louis Rauch, engr. and treas.

ILG ELECTRIC VENTILATING CO., 2850 N. Crawford ave., Chicago, Ill. Electric ventilating fans, blowers, steam unit heaters, electric unit heaters, power roof ventilators, automatic shutters, portable cooling fans, air conditioning units. S. W. Weis, chmn.; J. M. Frank, pres., gen. mgr.; P. D. Briggs, R. A. Ilg, W. H. Rietz, vice-pres.; L. Steinebach, secy.; W. H. Hallstein, treas.; C. W. Dexter, adv. mgr.; A. G. Sutcliffe, engr.; W. H. Hallstein, pur. agt. **Det. Rep.**—A. H. Kirkpatrick, 415 Brainard st. **Adv. Agcy.**—Simmonds & Simmonds, 201 N. Wells st., Chicago, Ill.

ILLINOIS AUTOMOTIVE TRADE ASSN., 212 Lehmann bldg., Peoria, Ill. A. G. Miller, pres.; C. W. Coons, secy.-mgr.

IMPERIAL BRASS MFG. CO., 1200 W. Harrison st., Chicago, Ill. Fittings, couplers, faucets, flexible tubing, hose connections, oil gauges, valves, solder, etc. F. McNellis, pres.; W. A. Leonard, vice-pres., sales mgr.; F. C. Shafer, gen. mgr.; C. H. Benson, adv. mgr.; R. D. McIntosh, engr.; H. H. Smith, pur. agt.

INCANDESCENT LAMP DEPT. of General Electric Co., Nela Park, Cleveland, O. Auto lamps. Owen D. Young, chmn.; Gerard Swope, pres.; J. E. Kewley, vice-pres. in chge. of lamp dept., gen. mgr.; N. H. Boynton, western sales mgr.; E. E. Potter, eastern sales mgr.; Ward Harrison, engr.; F. P. Harris, pur. agt.; H. F. Barnes, sales promotion mgr. **Adv. Agcy.**—Batten, Barton, Durstine & Osborn, 1614 Rand bldg., Buffalo, N. Y.; Foster and Davies, Cleveland, O.

INDEPENDENT PNEUMATIC TOOL CO., 600 W. Jackson blvd., Chicago, Ill. Portable electric and pneumatic drills, screw drivers, nut setters, sanders, grinders, hammers. Neil C. Hurley, pres.; W. A. Nugent, vice-pres.; Neil C. Hurley jr., secy.; E. G. Gustafson, treas.; C. N. Kirchner, adv. mgr.; F. Forss, engr.; H. Hafferkamp, pur. agt. **Det. Rep.**—V. W. Robinson, 416 Garfield bldg.

INDIAN MOTOCYCLE CO., 837 State st., Springfield, Mass. Motorcycles and sidecars. E. Paul duPont, pres.; L. F. Hosley, vice-pres., gen. mgr.; Hubert duPont, second vice-pres.; L. B. Mason, secy.-treas.; J. A. Wright, dir. of sales and adv.; Douglas McGregor, engr.; D. L. Moody, pur agt. **Det. Rep.** — Brown Motor Co., 2625 Grand River ave. **Adv. Agcy.**—W. I. Tracy, Inc., 205 E. 42nd st., New York, N. Y.

INDIANA BODY CO., 615-621 South H st., Richmond, Ind. Truck cabs and commercial bodies of all types. F. F. Riggs, pres., treas.; L. T. Burkett, vice-pres.; R. A. Carter, secy.; G. O. Stuck, fcty. supt.

INDIANAPOLIS DROP FORGING CO., 1300 Madison ave., Indianapolis, Ind. Drop forgings, steam hammer forgings. L. M. Fehrenbach, vice-pres., gen. mgr.

INDUSTRIAL ALCOHOL INSTITUTE, Inc., 420 Lexington ave., New York, N.Y. Industrial alcohol. Glenn Haskell, pres.; J. Warren Kinsman, vice-pres.; R. E. Boyce, secy.; J. W. McLaughlin, treas.

INDUSTRIAL WIRE CLOTH PRODUCTS CORP., 29274 Brush st., Wayne, Mich. Air cleaners, breathers, oil pump strainers, cowl ventilator screens, etc. F. A. Vollbrecht, pres., gen. mgr.; C. E. Jacobs, vice-pres., engr.; I. C. Vollbrecht, secy.; W. F. Hoffman, treas.; H. F. Schulte, sales mgr.; G. Pushelberg, pur. agt.; A. Zech, fcty. supt. **Det. Rep.**—B. B. Holt, 869 Burlingame.

INGERSOLL-RAND CO., 11 Broadway, New York, N. Y. Aftercoolers, blowers, compressors, stationary and portable pumps, diesel engines, hoists, pneumatic tools, wrenches, drills, grinders, riveters and holders-on. George Doubleday, chmn.; D. C. Keefe, pres.; W. R. Grace, L. D. Albin, G. A. Gallinger, vice-pres.; C. C. Hay, secy.; Ed. Davis, treas.; L. B. Abrams, sales mgr.; G. W. Morrison, adv. mgr.; F. W. O'Neil, engr.; C. F. Schwep, pur. agt. **Det. Rep.**—Ingersoll-Rand Co., 2832 E. Grand blvd.

INGERSOLL STEEL & DISC DIV., Borg-Warner Corp., New Castle, Ind. Open hearth and electric furnace high carbon and alloy steels, fabricated parts. R. C. Ingersoll, pres.; H. G. Ingersoll, vice-pres., gen. mgr.; A. P. Zetterberg, vice-pres., secy.; S. L. Ingersoll, vice-pres.; R. M. Atwater, engr.; H. D. Warfield, pur. agt.; A. C. Gaylord, gen. supt. **Det. Rep.**—R. L. Pointer, 4-125 General Motors bldg. **Adv. Agcy.**—Rogers & Smith, 20 N. Wacker dr., Chicago, Ill.

INLAND MFG. DIV., General Motors Corp., 2727 Inland ave., Dayton, O. Rubber and plastic steering wheels, metal rubber running boards, windshield and window weatherstrips, metal rubber motor mounts, pedal pads, rubber cements, spring clutches, defroster and hydraulic brake hose, etc. W. S. Whittaker, gen. mgr.; H. C. Berkeley, sales and adv. mgr.; H. D. Geyer, engr.; J. D. O'Brien, pur. agt.; C. P. Nellis, fcty. mgr. **Det. Rep.**—L. A. Bentz, 13-103 General Motors bldg. **Adv. Agcy.**—Geyer, Cornell & Newell, Inc., Third National bldg., Dayton, O.

INLAND STEEL CO., 38 S. Dearborn st., Chicago, Ill. Sheets, hot rolled, cold rolled, galvanized, enameling electrical, tin mill products, strip, bars, etc. L. E. Block, chmn.; E. L. Ryerson jr., vice-chmn.; P. D. Block, pres.; J. L. Block, exec. vice-pres.; A. C. Roeth, F. R. Meyer jr., W. J. Hammond, C. B. Ran-

(Continued on Page 73)

● When you use L·O·F Safety PLATE Glass to replace broken or cracked windshields or windows for your car owners, you are contributing greater comfort and added enjoyment to their motoring. And you make a LARGER profit for yourself. This finer glass provides clearer vision for both driver and passengers and definitely reduces eyestrain and fatigue.

L·O·F Safety PLATE Glass, unlike ordinary Safety Glass, is made from glass that is carefully ground to eliminate waviness and distortion and then polished to a mirror-like brilliance. . . It is recognized by motorists, everywhere, as a product of Highest Quality. And because of its superior features, it is the selection of many motorcar manufacturers as original equipment.

Libbey·Owens·Ford Glass Company, Toledo, Ohio.

REPLACE WITH

LIBBEY·OWENS·FORD

SAFETY plate GLASS

State Motor-Vehicle Registrations for 1937

(Compiled for calendar year from reports of State authorities)

State	Registered motor vehicles, private and commercial: Total motor vehicles	Passenger motor vehicles: Total	Passenger motor vehicles: Automobiles (including taxicabs)	Passenger motor vehicles: Motor busses	Motor-trucks, tractor trucks, etc	Other registered vehicles: Trailers and semi-trailers [4]	Other registered vehicles: Motorcycles	Publicly owned vehicles, Federal: Motor vehicles	Federal: Trailers and semi-trailers	Federal: Motorcycles	State, county, and municipal [6]: Motor vehicles	State, county, and municipal [6]: Trailers and semi-trailers	State, county, and municipal [6]: Motorcycles	Dealers' registrations and plates: Regular registrations	Dealers' registrations and plates: Extra sets of plates	1936 total registered motor vehicles	Year's change in motor-vehicle registrations: Increase or decrease	Year's change: Percentage change
Alabama	313,359	257,218	253,653	3,595	56,111	4,850	830	1,917	44	14	3,856	.....	191	2,914	.....	297,292	16,067	5.4
Arizona	129,210	106,237	105,793	444	22,973	4,321	423	2,236	80	7	1,891	114	27	2,179	.....	115,035	14,175	12.3
Arkansas	229,867	173,923	173,575	348	55,944	12,278	507	2,096	25	1	2,806	12	26	550	.....	217,227	12,640	5.8
California	2,484,653	2,189,378	2,189,378		295,275	132,932	11,260	7,140	280	90	23,359	1,523	1,074	5,145	.....	2,327,984	156,669	6.7
Colorado	337,217	282,123	281,080	1,043	55,094	1,468	1,316	1,899	12	22				3,492	.....	316,050	21,167	6.7
Connecticut	436,564	368,473	367,413	1,060	68,091	4,904	1,996	669	5	1	3,672	67	230	2,844	7,831	403,263	33,301	8.3
Delaware	63,599	53,285	53,285		10,314	2,645	236	382	15	9	950	25	62	756	.....	59,629	3,970	6.7
Florida	418,145	347,837	346,230	1,607	70,308	16,238	1,244	1,646	43	15	5,131	.....	180	2,765	.....	386,907	31,238	8.1
Georgia	441,847	363,641	363,233	408	78,206	12,262	1,085	3,255	81	49	(10)			3,069	.....	410,583	31,264	7.6
Idaho	142,110	113,605	113,477	128	28,505	18,645	564	1,344	74	.....	1,447	112	11	486	.....	133,037	9,073	6.8
Illinois	1,768,946	1,554,567	1,554,567		214,379	23,210	5,827	3,484	137	25	8,395	265	663	4,329	.....	1,659,750	109,196	6.6
Indiana	956,016	815,724	814,564	1,160	140,292	61,102	4,092	1,611	118	7	5,704	.....	[12] 147	2,644	.....	905,088	50,928	5.6
Iowa	745,602	657,734	657,734	.....	87,868	66,172	2,292	1,225	17	3	5,393	[12] 300	[12] 75	2,069	.....	728,414	17,188	2.4
Kansas	586,685	493,639	493,293	346	93,046	5,862	986	1,511	58	12	(10)			1,867	1,544	577,906	8,779	1.5
Kentucky	404,455	345,114	344,542	572	59,341		951	1,754	12	130	3,990	.....	.....	854	.....	372,576	31,879	8.6
Louisiana	323,498	245,665	245,180	485	77,833	14,321	834	1,825	49	25	4,822	[12] 291	[12] 60	369	.....	302,420	21,078	7.0
Maine	200,907	157,736	157,596	140	43,171	[13] 9,751	874	673	15	10	2,096	150	30	794	.....	191,554	9,353	4.9
Maryland	387,410	332,928	331,944	984	54,482	3,422	1,549	2,082	95	57	(10)			9,375	.....	378,462	8,948	2.4
Massachusetts	846,556	742,521	737,604	4,917	104,035	11,311	1,169	2,472	60	12	5,400	.....	.....	3,446	20,710	816,711	29,845	3.7
Michigan	1,505,111	1,359,665	[17] 1,359,665		145,446	133,863	4,078	2,529	74	18	(10)			5,981	.....	1,373,676	131,435	9.6
Minnesota	822,598	704,437	704,155	282	118,161	29,704	2,074	2,490	55	10	4,723	.....	.....	(18)	.....	783,627	38,971	5.0
Mississippi	226,286	173,214	170,388	2,826	53,072	2,078	234	1,585	18	1	(10)			2,428	.....	205,890	20,396	9.9
Missouri	835,895	701,894	701,438	456	134,001	31,055	1,712	2,222	12	16	2,079	.....	8	2,105	.....	809,615	26,280	3.2
Montana	173,892	134,729	133,811	918	39,163	2,812	457	1,731	20	.....	1,846	36	.....	986	.....	167,150	6,742	4.0
Nebraska	412,726	350,833	350,569	264	61,893	30,091	985	1,166	9	2	2,339	.....	40	1,600	2,718	413,787	−1,061	−0.3
Nevada	40,655	32,563	32,384	179	8,092	1,262	113	565	17	1	610	38	7	88	109	38,509	2,146	5.6
New Hampshire	125,939	99,983	99,983		25,956	4,471	963	649	16	1	600	.....	.....	594	.....	122,236	3,703	3.0
New Jersey	994,497	861,795	856,423	5,372	132,702	6,692	4,674	2,653	75	9	9,490	.....	567	2,895	.....	943,412	51,085	5.4
New Mexico	118,106	90,833	90,322	511	27,273	2,660	337	1,905	99	.....	905	153	40	368	.....	108,729	9,377	8.6
New York	2,561,703	2,233,695	2,233,695	.....	328,008	36,213	10,230	5,859	542	108	25,006	896	[12] 1,121	5,369	.....	2,453,542	108,161	4.4
North Carolina	525,350	449,897	449,201	696	75,453	40,129	1,449	2,482	83	2				(18)	.....	504,517	20,833	4.1
North Dakota	173,188	141,104	141,018	86	32,084	816	262	719	9	.....	624	.....	.....	601	485	167,241	5,947	3.6
Ohio	1,876,132	1,695,648	1,695,648		180,484	119,269	8,194	2,595	117	16	18,881	829	.....	4,612	28,007	1,777,048	99,084	5.6
Oklahoma	547,263	448,588	446,083	2,505	98,675	26,471	1,143	2,472	96	13	6,456	.....	.....	3,468	.....	531,914	15,349	2.9
Oregon	360,348	299,689	298,971	718	60,659		1,559	2,457	33	3	4,289	.....	.....	715	1,093	332,729	27,619	8.3
Pennsylvania	1,984,821	1,738,797	1,733,014	5,783	246,024	26,889	10,864	4,187	84	28	17,327	480	1,349	33,126	.....	1,857,366	127,455	6.9
Rhode Island	167,586	148,583	148,145	438	19,003	571	724	466	17	1	1,325	22	105	384	.....	159,140	8,446	5.3
South Carolina	296,224	250,820	250,623	197	45,404	5,716	785	1,510	13	6	3,750	.....	178	814	1,679	278,829	17,395	6.2
South Dakota	184,743	155,948	155,856	92	28,795	20,121	419	1,177	16	3	1,062	117	11	670	.....	186,480	−1,737	−0.9
Tennessee	400,384	341,648	341,186	462	58,736		1,473	1,993	174	1	6,900	.....	.....	595	.....	380,792	19,592	5.1
Texas	1,552,114	1,237,348	1,236,440	908	314,766	47,162	3,667	5,228	191	150	14,256	1,052	372	3,725	.....	1,478,124	73,990	5.0
Utah	126,692	105,571	104,922	649	21,121	953	439	1,631	50	14	1,894	171	85	586	.....	116,816	9,876	8.5
Vermont	88,958	79,606	79,501	105	[20] 9,352	1,706	491	806	13	.....				595	.....	84,155	4,803	5.7
Virginia	440,713	371,708	371,708	.....	69,005	6,730	1,880	3,267	70	66	5,404	150	[12] 92	5,689	.....	417,463	23,250	5.6
Washington	535,483	450,906	450,143	763	84,577	16,031	2,055	2,961	39	24	6,872	297	163	1,473	3,488	499,760	35,723	7.1
West Virginia	290,837	246,162	245,440	722	44,675	3,164	1,161	1,075	6	.....	4,860	167	71	14,244	.....	280,015	10,822	3.9
Wisconsin	854,374	713,166	712,510	656	141,208	5,411	3,240	2,165	21	6	8,149	152	266	2,626	.....	835,178	19,196	2.3
Wyoming	81,837	64,459	64,459	.....	17,378	10,099	281	1,155	35	14	627	93	.....	361	.....	76,603	5,234	6.8
District of Columbia	184,119	165,257	163,886	1,371	18,862	2,152	708	1,419	22	60	2,094	94	170	3,803	.....	181,319	2,800	1.5
At large	.....	.....	.....	.....	.....	.....	.....	2,432	32	7	.....	.....	.....	.....	.....	.....	.....	.....
Total	29,705,220	25,449,924	25,405,728	44,196	4,255,296	1,019,985	104,686	104,792	3,278	1,069	231,280	7,606	7,421	150,498	67,664	28,165,550	1,539,670	5.5

Average Cost of Automobile Operation in Cities

Percentage of Families Reporting Car Ownership, Average Number of Miles Driven, and Average Expenditures for Operation of Automobile for Family Use, By Income, 1935-36

(White nonrelief families that include husband and wife, both native-born)

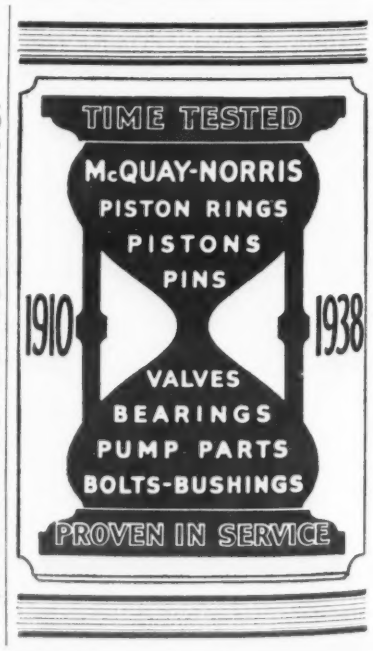
Income class 2/	Total number of families	Percentage 3/ of families reporting car ownership	Average 4/ number of miles driven for family use	Average expenditures chargeable to family use, for specified items of operation 5/: All items	Gasoline	Oil	Tires and tubes	Repairs and service	Automobile insurance	Other 7/	Percentage 6/ of total operation expense charged to family use of car
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
$ 250—$ 499	61	41.0	2,024	$16	$ 8	$ 1	$ 1	$ 1	$ 1	$ 4	95,5
500— 749	229	44.1	2,765	24	14	2	2	1	1	4	82.8
750— 999	408	50.0	3,218	31	16	2	3	2	2	6	88.6
1,000— 1,249	467	61.9	4,500	48	27	4	4	3	3	7	80.9
1,250— 1,499	425	69.4	4,834	66	36	5	6	5	6	8	82.9
1,500— 1,749	343	80.2	5,737	90	50	7	7	7	8	11	83.6
1,750— 1,999	282	75.9	5,747	86	48	6	6	5	10	11	86.4
2,000— 2,249	215	81.9	6,877	111	62	9	7	8	12	13	81.6
2,250— 2,499	163	83.4	6,969	110	59	9	8	8	13	13	81.2
2,500— 2,999	198	88.4	7,168	135	71	10	8	12	17	17	83.0
3,000— 3,999	201	90.0	9,162	156	88	12	12	13	16	15	88.9
4,000— 4,999	64	89.1	10,482	177	100	14	10	17	20	16	93.1
5,000— 9,999	62	98.4	10,680	221	116	16	15	21	30	23	88.1

1/ The cities studied were: Lincoln, Illinois; Boone, Iowa; Columbia and Moberly, Missouri; Mount Vernon and New Philadelphia, Ohio; and Beaver Dam, Wisconsin.
2/ Expenditures of families with incomes of less than $250 and of $10,000 and over were not analyzed.
3/ Percentages are based on the total number of families in each income class.
4/ Averages are based on the number of families owning one or more cars and reporting number of miles driven for family use. Mileage for business use of family car is excluded.
5/ Averages are based on the total number of families in each income class regardless of whether they had expenditures for operating automobiles. Transportation to and from work was considered as a family use of the car, but all other expense attributable to business was deducted before these averages were computed. The average total operation expense per family for families owning automobiles may be computed by using the percentages in columns 3 and 12.
6/ Percentages are based on total expense for operation of the family automobile, both for business and family use. The difference between percentages in this column and 100 per cent is the percentage chargeable to business use of the family car.
7/ This includes expense for garage rent, parking, licenses, personal property tax, fines, damages, tolls, accessories, automobile association dues and other automobile expense.
Source: Bureau of Home Economics, U. S. Department of Agriculture.

Percentage of Truck Makes to Total Registrations, 1932-1937

MAKE	1937 Regis-trations	1937 Pct. of Total	1936 Regis-trations	1936 Pct. of Total	1935 Regis-trations	1935 Pct. of Total	1934 Regis-trations	1934 Pct. of Total	1933 Regis-trations	1933 Pct. of Total	1932 Regis-trations	1932 Pct. of Total	Six-year Average	Av. Pct. 6-Yrs.
Austin	.....	.....	.....	.....	181	.04	494	.12	1,053	.42	.....	.....	.....	.10
Autocar	2,181	.35	1,451	.24	1,001	.20	1,139	.28	1,127	.45	1,015	.61	1,319	.35
Brockway	1,593	.26	1,695	.28	1,245	.24	1,213	.30	875	.35	752	.41	1,229	.30
Buick	.....	.....	.....	.....	116	.02	152	.03	.....	.....	.....	.....	.....	.....
Chevrolet	183,674	29.71	204,344	33.41	167,129	32.73	157,507	38.99	99,880	40.62	60,784	33.13	145,553	33.77
Diamond-T	8,118	1.31	8,750	1.43	6,454	1.26	5,440	1.32	4,139	1.68	2,250	1.24	5,859	1.37
Dodge	64,098	10.37	85,295	13.95	61,488	12.04	48,252	11.92	28,034	21.40	8,744	4.84	49,319	12.42
Federal	2,339	.38	2,930	.48	2,190	.43	1,962	.48	1,360	.55	1,167	.64	1,991	.49
Ford	189,376	30.63	177,244	28.98	185,848	36.39	128,250	31.75	62,397	25.33	66,937	37.12	135,009	31.60
G.M.C.	43,522	7.04	26,980	4.41	11,442	2.24	10,449	2.58	6,602	2.68	6,359	3.52	17,559	3.74
Indiana	1,351	.22	1,705	.28	862	.17	729	.18	1,252	.51	957	.52	1,143	.31
International	76,174	12.32	71,958	11.76	53,471	10.47	31,555	7.82	26,658	10.84	15,752	8.73	45,928	10.30
Mack	5,513	.89	4,226	.69	1,515	.30	1,830	.45	1,652	.67	1,425	.78	2,694	.63
Plymouth	13,709	2.22	2,420	.39	660	.13	123	.03	.....	.....	.....	.....	2,818	.43
Reo	4,254	.69	4,227	.69	5,101	1.00	5,035	1.24	3,042	1.27	3,187	1.76	4,141	1.10
Sterling	311	.05	277	.04	174	.03	134	.03	108	.04	227	.12	205	.05
Stewart	1,148	.19	1,280	.21	880	.17	736	.18	684	.27	867	.48	933	.25
Studebaker	5,129	.83	3,279	.54	2,100	.41	1,697	.42	2,413†	.98	2,430	1.34	2,841	.75
Terraplane	4,823	.78	1,905	.31	638	.12	517	.12	.....	.....	.....	.....	1,314	.20
White	5,933	.96	5,757	.94	3,304	.65	3,963	.98	1,384	.56	2,138	1.18	3,747	.88
Willys	1,122	.18	2,441	.40	2,280	.45	25	.006	233	.09	1,132	.62	1,206	.29
Miscellaneous	3,861	.62	3,480	.57	2,604	.51	2,684	.....	2,976	.....	4,290	2.37	3,316	.68
Total	618,249	100%	611,644	100%	510,683	100%	403,886	100%	245,869	100%	180,413	100%	21,406	100%

†Includes Rockne.



Who's Who

(Continued from Page 71)

dall, vice-pres.; J. H. Morris, secy.; W. D. Truesdale, treas.; Keith J. Evans, adv. mgr.; F. V. Carroll, chief engr.; W. P. Mortensen, pur. agt. **Det. Rep.**—J. H. Fitch jr., 1132 Fisher bldg. **Adv. Agcy.**—Buchen Co., 400 W. Madison st., Chicago, Ill.

INSULITE CO., 1100 Builders Exchange, Minneapolis, Minn. Industrial insulation. R. H. M. Robinson, pres.; E. H. Batchelder jr., senior vice-pres.; R. W. Andrews, vice-pres. in chge. of operations; R. D. Main, secy.-treas.; E. W. Morrill, gen. sales mgr.; M. C. Fairfield, adv. mgr.; M. S. Wunderlich, chief research engr.; J. B. Norman, pur. agt.; M. G. Jensen, gen. mer. mgr.; M. C. Juell, exec. asst. **Det. Rep.**—O. R. LeVene, 205 W. Wacker dr., Chicago, Ill.

INTERNATIONAL BUSINESS MACHINES CORP., 590 Madison ave., New York, N. Y. Electric bookkeeping and accounting machines, time recorders and electric time systems, writing machines, ticketographs, test scoring machine. Thos J. Watson, pres.; F. W. Nichol, vice-pres., gen. mgr.; O. E. Braitmayer, W. F. Titus, vice-pres.; J. G. Phillips, secy.-treas.; Arch Davis, adv. mgr. **Det. Rep.**—L. B. O'Loughlin, dist. mgr., 420 E. Jefferson ave. **Adv. Agcy.** — Frank Presbrey Co., Inc., 247 Park ave., New York, N. Y.

INTERNATIONAL HARVESTER CO., Inc., 180 N. Michigan ave., Chicago, Ill. Motor trucks, farm tractors, industrial tractors, farm machines. Addis E. McKinstry, chmn.; Sydney G. McAllister, pres.; Maurice F. Holahan, Fowler McCormick, William S. Elliott, Charles R. Morrison, John Morrow jr., vice-pres.; Sanford B. White, secy.; Arnold B. Keller, treas.; W. F. McAfee, sales mgr.; F. W. Heiskell, adv. mgr.; E. A. Johnston, V. P. Engineering, engr.; R. M. McCulloch, pur. agt.; J. L. McCaffrey, dir. of sales; P. V. Moulder, mgr. truck sales; C. E. Jarchow, comptr. **Det. Rep.**—G. B. Abbott, 5915 W. Warren ave.

(See display advertising index)

INTERNATIONAL LOCK AND PRODUCTS CO., Inc., 743 Beaubien st., Detroit, Mich. Locks, key blanks, key cutting equipment, special tools. Reuben Simon, pres., sales mgr.; Abraham Whitestone, R. P. Simon, vice-pres.; Frank A. Feakins, secy.-treas.; Betty Paul, adv. mgr.; A. Whitestone, R. Simon, pur. agt.

INTERNATIONAL SCREW CO., 9444 Roselawn ave., Detroit, Mich. Machine screws, bolts. Wm. L. Nelson, pres., gen. mgr.; W. C. Nelson, vice-pres., sales mgr.; L. F. Nelson, secy.-treas.; K. E. Nelson, pur. agt.

INTERNATIONAL SPARK PLUG CO., 123 S. Broad st., Philadelphia, Pa. Spark plugs. W. F. Price, pres.; T. A. Larkin, secy.-treas.; R. E. Hoeltzel, sales and adv. mgr.; G. S. Biles, engr.; A. A. Andreason, pur. agt.; S. Dershwin, export mgr. **Adv. Agcy.**—B. W. Stelle, Inc., Philadelphia, Pa.

INTERSTATE DROP FORGE CO., 4051 N. 37th st., Milwaukee, Wis. Drop forgings, upset forgings, special rivets. C. E. Stone, pres., gen. mgr.; L. S. Peregoy, H. C. Osborn, vice-pres.; C. C. Bremer, pur. agt., secy.-treas. **Det. Rep.**—F. A. Wade, 324 Stephenson bldg.

IOWA AUTOMOBILE DEALERS ASSN., 1011 Locust st., Des Moines, Ia. Trade association. A. B. Chambers, pres.; Harry Wardell, vice-pres.; Tom A. Coughlin, treas.; Tom B. Roberts; Walter Ferrell, gen. mgr., secy., pur agt.

J

JACOBS, F. L. CO., 1043 Spruce st., Detroit, Mich. Automotive parts. R. C. Jacobs, pres., sales mgr.; C. S. Jacobs, vice-pres., gen mgr.; R. W. Hook, vice-pres.; C. R. Robertson, secy.; A. Schoenheit, engr.; W. H. Siffert, pur. agt.; E. C. Brendike, compt.

JAEGER WATCH CO., Inc., 304 E. 45th st., New York, N. Y. Clocks and instruments. Edgar L. Vail, pres., gen. and sales mgr.; H. L. Bill, C. Marcus, vice-pres.; H. A. Gossner, secy.; J. F. Schiebel, asst. treas.; J. Berge, engr.; C. J. Boyle, pur. agt., asst. secy. **Det. Rep.**—E. J. Cosgrave, 2-128 General Motors bldg.

JAHN, C. R. CO., 228 N. LaSalle st., Chicago, Ill. Heavy duty low platform trailers. C. R. Jahn, pres., gen. mgr.; H. W. Jahn, vice-pres.; P. J. Huxmann, secy.; M. E. Berkovec, treas.; H. G. Rendall, engr.; F. L. Blix, pur. agt. **Det. Rep.**—Contractors Machinery Co., 16425 Hamilton ave. **Adv. Agcy.**—Russell T. Gray, Inc., 305 W. Wacker dr., Chicago, Ill.

JAMBOR TOOL & STAMPING CO., 3057 N. 30th st., Milwaukee, Wis. Replacement parts for Ford, Chevrolet and Plymouth cars. R. B. Lorch, pres.; R. B. Pressinger, vice-pres.; L. H. Brown, secy.-treas., gen. and sales mgr.; J. Christoffel, engr.; R. A. Nevins, pur. agt. **Det. Rep.** — J. C. Roper, 3157 N. College ave., Indianapolis, Ind.

JAMESTOWN METAL EQUIPMENT CO., Inc., Jamestown, N. Y. Radiators. O. A. Lenna, pres., gen. mgr.; G. A. Lawson, vice-pres., sales and adv. mgr.; H. L. Briggs, vice-pres.; H. A. Lenna, secy.-treas., pur. agt.; David Lincoln, dir.; Otto Carlon, gen. supt.; F. L. Foster, engr.

JAM HANDY PICTURE SERVICE, Inc., 2900 E. Grand blvd., Detroit, Mich. Motion pictures, slide films. Jamison Handy, pres.; Oliver Horn, vice-pres., gen. mgr.; John Strickler, secy.; A. W. Kinney, treas.; W. H. Knowles, sales mgr.; J. C. Coffey, adv. mgr.; A. T. Stanton, pur. agt.

JENKINS BROS., 510 Main st., Bridgeport, Conn. Bronze, iron and steel valves, mechanical rubber goods and tire valves. Farnham Yardley, chmn., pres.; B. J. Lee, vice-pres., gen. mgr.; A. J. Yardley, W. H. Utz, W. G. LeCompte, vice-pres.; A. Engle, secy.; E. M. Keating, treas.; C. C. Chamberlain, adv. mgr.; H. Z. Gora, plant engr.; L. D. Muldoon, pur. agt. **Det. Rep.**—W. J. Frisby, 587 Malvern rd., Akron, O. **Adv. Agcy.**—Picard Advertising, Inc., 250 W. 57th st., New York, N. Y.

JEWEL PAINT & VARNISH CO., 345 N. Western ave., Chicago, Ill. Paints, varnishes, enamels, metal polish. D. A. Murphy, chmn.; Robert O. Clark, pres.; O. Feyder, vice-pres.; Andrew Hussar, secy.; H. J. Wachter, treas.; J. A. Zimmermann, sales mgr.; A. L. Russell, adv. mgr.; L. J. Destree, engr.; O. Kretschmar, pur. agt. **Det. Rep.**—R. K. Holden.

JIG BUSHING CO., 454 N. Cass ave., Pontiac, Mich. Bushings and precision parts. A. J. Gifford, pres.; O. R. Briney, vice-pres., gen. mgr.; E. A. Heidlinger, secy.-treas. **Det. Rep.** — Leland-Gifford Co., 1533 Dime Bank bldg.

JIFFY LUBRICATOR CO., Inc., 806 Northern Pacific ave., Fargo, N. D. Hi-pressure lubricators. W. A. McMillan, pres., gen. mgr., treas.; Geo. W. Mitchell, vice-pres., secy.

JOHNS-MANVILLE CORP., 22 E. 40th st., New York, N. Y. Brake linings, clutch facings, packings, thermal and acoustical insulations. W. R. Seigle, chmn.; Lewis H. Brown, pres.; L. R. Hoff, S. A. Williams, vice-pres.; Vandiver Brown, secy.; C. H. Roberts, treas.; E. S. Crosby, gen. mgr. replacement div.; R. H. Soulis, gen. mgr. equipment div.; H. D. Chenault, sales mgr.; H. M. Shackelford, adv. mgr.; R. E. Berg, chief engr.; F. W. Rowe, pur. agt. **Det. Rep.** — Johns-Manville Sales Corp., 832 Fisher bldg. **Adv. Agcy.** — J. Walter Thompson Co., 420 Lexington ave., New York, N. Y.

JOHNSON BRONZE CO., S. Mill st., New Castle, Pa. Bushings, bearings and bar bronze. P. J. Flaherty, pres.; Louis Sandler, vice-pres.; J. P. Flaherty, treas.; Eugene Scanlon, adv. mgr.; J. B. Lasky, engr.; T. A. McKay, pur. agt. **Det. Rep.**—J. H. Burgess, 12-253 General Motors bldg.

JONES & LAMSON MACHINE CO., 7 Whitmore st., Springfield, Vt. Universal turret lathes, flat turret lathes, fay automatic lathes, radial and tangent type screw cutting dies, optical comparators, automatic thread grinders. R. E. Flanders, pres.; K. H. Woolson, vice-pres., gen. mgr.; J. E. Lovely, vice-pres., chief engr.; J. C. Price, sales engr. and adv.; J. W. Bennett, secy., asst. treas.; W. D. Woolson, treas.; E. F. St. Mary, pur. agt.; E. F. Novakoski, asst. sales mgr.; John Lawrence, asst. sales engr. **Det. Rep.**—E. N. Moor jr., Jones & Lamson Mach. Co., 2832 E. Grand blvd.

JONES & LAUGHLIN STEEL CORP., Third ave. and Ross st., Pittsburgh, Pa. Hot-rolled products, forgings, strip, sheets, tubular products, wire, tin mill products, fabricated structural work, etc. H. E. Lewis, chmn., pres.; B. F. Jones, 3rd., W. J. Creighton, Wm. Larimer Jones jr., M. C. Angloch, S. S. Marshall jr., L. M. Parsons, vice-pres.; B. F. Jones 3rd, secy.; G. C. Congdon, adv. mgr.; C. W. Littler, engr.; F. W. Ochenhirt jr., pur. agt.; W. H. Dupka, controller. **Det. Rep.**—Walter J. Bothwell, 2111 Fisher bldg. **Adv. Agcy.**—Calkins & Holden, 247 Park ave., New York, N. Y.

JOYCE-CRIDLAND CO., 2027 E. First st., Dayton, O. Jacks and lifts. J. M. Switzer, chmn., pres.; Huston Brown, vice-pres., sales mgr.; Warren E. Webster, secy.; W. F. Bippus jr., serv. mgr.; Merle P. Smith, asst. sales mgr., adv. mgr.; Kert Hott, engr.; R. V. Park, pur. agt. **Det. Rep.**—Paul Acton, 600 Michigan Theatre bldg. **Adv. Agcy.**—Stewart H. Aukeney, 53 E. Peach Orchard rd., Dayton, O.

JUDKINS, J. B. CO., 38 Main st., Merrimac, Mass. Enclosed automobile bodies, trailers—house and sales coach trailers. John B. Judkins, pres., gen. mgr.; John F. Dobben, vice-pres., engr.; I. C. Knight, secy.; John B. Judkins, treas.; Ralph I. Condon, pur. agt. **Det. Rep.**—Getsinger-Fox Co., 302 Stephenson bldg.

JUILLIARD, A. D. & CO., Inc., 40 W. 40th st., New York, N. Y. Woolens, worsteds, corduroy, velveteen and cotton goods. Duncan D. Sutphen, chmn.; Robert Westaway, pres.; P. M. Smith, vice-pres.; O. A. Schwarz, 2nd vice-pres.; Geo. W. Retz, secy.; Robert Westaway, treas. **Det. Rep.**—William O. Stoddard, New Center bldg. **Adv. Agcy.**—Gotham Advertising Co., 250 Park ave., New York, N. Y.

JUSTUS AUTO SUPPLY, 175 E. Long st., Columbus, O. Trailers. C. E. Justus, pres., treas.; H. P. Hayes, sales mgr.; Walter Taylor, secy. **Adv. Agcy.**—Byers-Bowman, Columbus, O.

K

KABIN KOACH CO., 2260 Scott Lake road, Pontiac, Mich. Commercial display and house trailers. H. N. Nickerson, pres.; Frank Muller and Mathew Kreg, vice-pres.; B. Curtis Grieb, secy. and treas.

KAHN, ALBERT, Inc., 345 New Center bldg., Detroit, Mich. Architects and engineers, specializing in industrial plants. Albert Kahn, pres.; Moritz Kahn, vice-pres.; E. M. Olson, secy.; Louis Kahn, treas.

KARPEN, S., & BROS., 636-678 W. Cermak road, Chicago, Ill. Transportation seating. Leo Karpen, pres.; Jack S. Karpen, vice-pres.; C. L. Weil, vice-pres. and sales mgr.; G. B. Cross, vice-pres.; C. E. Kincaid, secy.-treas.; N. V. Field, adv. mgr.; Louis Schmidt, pur. agt. **Adv. Agcy.**—Beaumont & Hohman, 6 N. Michigan ave., Chicago, Ill.

KAY SALES CO., 17 W. 60th st., New York, N. Y. Automotive parts. H. R. Kay, pres. and gen. mgr.; S. H. Levine, vice-pres.; M. Kay, secy. and treas.

(Continued on Page 74)

RUBBING COMPOUNDS • BUFFING AND POLISHING COMPOSITIONS • LIQUID POLISHES

McAleer *Announces* a New Perfected Sanding Compound for Automotive Finishes

It is a generally accepted fact that the success of modern fast-drying motor car finishes has been dependent to a large extent upon the efficiency and perfect adaptability of the rubbing materials used with them. The McAleer Manufacturing Company has made a number of contributions to this important field of automotive manufacture.

When lacquer was introduced as an automotive finish it was McAleer's privilege to work with car and body manufacturers in solving the problems which at that time threatened to jeopardize this most important development.

The increasing use of synthetic enamel as an automotive finish has called for the development of highly specialized rubbing materials adapted to the peculiar requirements of this type of finish. And again McAleer has anticipated the requirements of this ever-changing industry by developing a sanding compound which has already proven its ability to reduce both labor costs and material costs, and at the same time produce superior results. Complete information will be gladly furnished on request.

McALEER MANUFACTURING COMPANY, DETROIT • WALKERVILLE

Founded 1923

McALEER

RUBBING COMPOUNDS • BUFFING AND POLISHING COMPOSITIONS • LIQUID POLISHES

Who's Who

(Continued from Page 73)

KAY & ESS CO., Leo and Kiser sts., Dayton, O. Paints, varnishes, lacquers. H. G. Kittredge, pres.; A. J. Turner, vice-pres. and gen. mgr. **Det. Rep.**—R. W. Prina, 1116 S. Grinnell, Maplewood, Jackson, Mich.

K-D LAMP CO., 610-616 W. Court st., Cincinnati, O. Truck signal lights, reflex reflectors, dome lamps, turn signals, rear vision mirrors, truck flares, danger flags, fog, driving, spot, parking, fender, and stop and tail lamps, replacement parts, tail lamp doors and lenses, trailer connectors, switches, electric flares, clearance and marker lamps. H. R. Kerans, pres. and gen. mgr.; H. F. Griffin, vice-pres.; C. C. Clark, secy.-treas.; A. B. Dettmer, sales mgr. and pur. agt.; I. Schifrin, adv. mgr.; Wagn Trautner, engr. **Det. Rep.**—H. F. Griffin, 610 W. Court st., Cincinnati, O. **Adv. Agcy.**—Julian J. Behr, Inc., Dixie Terminal, Cincinnati, O.

K-D MFG. CO., 526 N. Plum st., Lancaster, Pa. Valve spring lifters, plier kits, washers, piston ringers, piston ring filer, hammer-type wheel pullers, valve keeper inserter, valve keeper receiver, hack saw frames, ignition point refacers, lamp bulb pliers, lamp bulb gloves, riveting dies, metal stampings. Martin C. Dellinger, pres.; Harry W. Kulp, treas.; Clyde P. Brewster, sales mgr.

KELLOGG COMPRESSOR & MFG. CORP., 97 Humboldt st., Rochester, N. Y. Air compressors, paint spray equipment, air meters, air operated tools. J. F. Weller, pres.; G. B. Collins, vice-pres.; D. W. Schelter, secy. and treas.

KELLY-SPRINGFIELD TIRE CO., Cumberland, Md. Tires, tubes, seat cushions, repair materials, accessories. Edmund S. Burke, pres.; H. C. Swearingen, vice-pres. and sales mgr.; A. F. Eggleston, vice-pres. and secy.-treas.; P. D. Collins, adv. mgr.; L. B. Gordon, engr.; L. F. Kellar, pur. agt.; J. C. Warden, plant supt. **Det. Rep.**—H. F. Smith, dist. mgr., 2832 E. Grand blvd. **Det. Distrib.**—Buhl Sons Co., foot of Adair. **Adv. Agcy.**—J. Stirling Getchell, Inc., New York, N. Y.

KENDALL REFINING CO., 77 N. Kendall ave., Bradford, Pa. Oil, gear lubricants, special purpose greases. Otto Koch, pres. and gen. mgr.; Jos. H. Bovaird, vice-pres.; H. H. Greene, exec. vice-pres.; T. O. Grisell, sales mgr.; W. T. Moffatt, adv. mgr.; S. M. Wolbert, engr.; J. B. Fisher, pur. agt. and secy. **Det. Rep.**—Versnick Bros. Oil Co., 2531 E. Davison ave. **Adv. Agcy.**—Batten, Barton, Durstine & Osborn, Inc., Grant bldg., Pittsburgh, Pa.

KENNEDY MFG. CO., N. Harrison st., Van Wert, O. Tool boxes, shop equipment, and other pressed steel items. C. F. Kennedy, pres. and gen. mgr.; R. K. Thompson, vice-pres., secy. and sales mgr.; L. F. Green, vice-pres., prod. mgr. and pur. agt., H. L. Kennedy, engr.

KENT-MOORE ORGANIZATION, Inc., 301-310 General Motors Research bldg., Detroit, Mich. Automotive service tools and equipment. William A. Kent, pres.; John E. Moore, vice-pres.; F. C. Bowles, secy.-treas.; H. L. Faust, sales mgr.; Addison W. Bacon, adv. mgr.; Geo. M. Graham, engr.; Robert S. McClure, pur. agt.

KERATOL CO., 348 Van Buren st., Newark, N. J. Artificial leather. Hugo Kleinhans, pres.; J. K. Weidig, vice-pres. and gen. mgr.; F. L. Ford, sales mgr.; M. C. Diedrich, adv. mgr.

KEYSTONE MFG. CO., 41-61 Chandler st., Buffalo, N. Y. Ratchet drills, wrenches, drilling posts, drill sleeves, extension sleeves and sockets, etc. Fred Engelking, pres.; Charles H. Chur, vice-pres., gen. mgr., pur. agt.; Philip G. Moses, secy. and treas.

KEYSTONE REAMER & TOOL CO., Millersburg, Pa. Reamers, taps, dies, drills, valve tools, valve seat grinders. T. F. Bradenbaugh, pres. and gen. mgr.; W. B. Bradenbaugh, sales mgr. and secy.-treas.; N. P. Hewitt, adv. mgr.; H. G. Wommer, engr.; R. A. Jury, pur. agt. **Det. Rep.**—A. L. Bernstine, 443 E. Fort st.

KEYSTONE TRAILER & EQUIPMENT CO., Inc., 2100 E. 10th st., Kansas City, Mo. Trailers. Harry N. Brown, pres.; Edw. J. Ziegler, vice-pres.; A. E. Margolin, secy.; Chas. V. Ziegler, sales mgr., pur. agt.

KILBORN-SAUER CO., 700 Post road, Fairfield, Conn. Lamps, mirrors and specialties. H. E. Kilborn, pres.; P. Sauer, vice-pres.; F. Sauer, secy.; H. J. Sauer, treas. **Det. Rep.**—M. L. Berman, 2722 Webb ave.

KING QUALITY PRODUCTS CO., 2320 Cooper st., St. Louis, Mo. Piston rings and expanders, pistons, pins and pin bushings, cylinder sleeves, sleeve assemblies, valves, guides, springs and keepers, connecting rod bearings, main and camshaft bearings, babbitt metal, water pumps and parts, King bolts and bushings, spring shackle bolts and bushings, tie rod bolts and bushings, silent U shackles, tie rod sockets, intermediate rods. W. K. Norris, pres.; B. G. Close, vice-pres. and gen. mgr.; R. F. Crom, vice-pres.; A. G. Drefs, secy.-treas.; C. C. Tapscott, adv. mgr.; A. J. Mummert, engr.; D. M. Crimmins, pur. agt. **Adv. Agcy.**—D'Arcy Advertising Co., St. Louis, Mo.

KING-SEELEY CORP., 315 S. First st., Ann Arbor, Mich. Gas, oil, heat gauges, ammeters, instrument panels, fuel pumps. Roy R. Seeley, chmn.; John Airey, pres. and gen. mgr.; William E. Baudemer, vice-pres. and sales mgr.; A. Neil Gustine, vice-pres.; Kathleen M. Conklin, secy.; Darwin T. Warner, pur. agt. and treas.
(See display advertising index)

KINNEAR MFG. CO., 1210 Fields ave., Columbus, O. Steel rolling doors and shutters, metal rolling grilles. L. R. Hildreth, pres.; Hollis Shirey, sales mgr.; H. H. Nutter, adv. mgr.; Fred Brightman, pur. agt. **Adv. Agcy.**—Wheeler, Kight & Gainey, Inc., 539 E. Town st., Columbus, O.

KIRK & BLUM MFG. CO., 2838-52 Spring Grove ave., Cincinnati, O. Dust collecting and exhaust systems, ventilating and air conditioning systems, industrial baking and drying ovens, sheet metal products, stampings. S. W. Kirk, pres. and gen. mgr.; R. J. Blum, vice-pres.; W. R. Meuttman, sales mgr. and treas.; C. F. Wulff, pur. agt. and secy. **Adv. Agcy.**—S. C. Baer Co., 800 Broadway, Cincinnati, O.

KLEMM AUTOMOTIVE PRODUCTS CO., 1718 N. Damen ave., Chicago, Ill. Engine governors, oil filters, oil pressure indicators, locking gas tank caps. E. R. Klemm, pres. and gen. mgr.; G. D. Rubey, vice-pres.; G. R. Klemm, treas.; C. E. Johnson, sales and adv. mgr.; E. R. Klemm, Jr., engr.; P. E. Klemm, pur. agt. and secy.

KNAPE & VOGT MFG. CO., 658 Richmond, N. W., Grand Rapids, Mich. Hardware, clamps, hinges, metal mouldings, reflectors, showcases, etc. F. J. Vogt, pres. and secy.; J. J. Knape, vice-pres. and treas.; F. J. Knape, sales and adv. mgr.; H. Knape, pur. agt. **Adv. Agcy.**—W. L. Diener, Inc., 919 N. Michigan ave., Chicago, Ill.

KNEUER TAIL BOARD CO., Inc., 126-128 Van Buren st., Newark, N. J. Tailboard hardware for truck bodies. Edward J. Kneuer, pres., gen. mgr. and treas.; Kathryn B. Kneuer, secy.

KNIGHT SCREW PRODUCTS CO., 7401 Lyndon ave., Detroit, Mich. Special screw machine products. William C. Knight, chmn. and pres.; Frederic D. Hegwood, vice-pres. and plant mgr.; Frederick F. Bastien, secy.-treas. and pur. agt.; F. J. Broad, sales mgr.

KNIGHTSTOWN BODY CO., Knightstown, Ind. Hearses and ambulances. R. L. Silver, pres. and gen. mgr.; J. A. Silver, pur. agt. and secy.-treas.

KOCH MFG. CO., Inc., 3400 Jewel st., Louisville, Ky. Generator cooling products, exhaust deflectors, hood fasteners, battery cables, grille guards. Louis A. Koch, Jr., pres.; H. H. Willits, gen. mgr.

KOZY COACH CO., 409 E. Michigan ave., Kalamazoo, Mich. House trailers and commercial coaches. C. M. Lutes, chmn., gen. mgr., adv. mgr. and treas.; F. H. Lutes, vice-pres. and secy.; F. L. Dennis, sales mgr. **Det. Rep.**—McDonald
(Continued on Next Page)

Canadian Registrations, 1907-1937

(Compiled by Canadian Automobile Chamber of Commerce)

Years	Number	Numerical Increase or Decrease	Percentage Increase or Decrease
1907	2,130		
1908	3,033	903 Increase	42.4% Increase
1909	4,763	1,730 "	57.0 "
1910	8,967	4,204 "	88.3 "
1911	21,519	12,552 "	139.9 "
1912	34,136	12,617 "	58.6 "
1913	50,558	16,422 "	48.0 "
1914	69,598	19,040 "	37.7 "
1915	89,944	20,346 "	29.2 "
1916	123,464	33,520 "	37.3 "
1917	197,799	74,335 "	60.2 "
1918	275,746	77,947 "	39.4 "
1919	341,316	65,570 "	23.8 "
1920	407,064	65,748 "	19.3 "
1921	465,378	58,314 "	14.3 "
1922	513,821	48,443 "	10.4 "
1923	585,050	71,229 "	13.9 "
1924	652,121	67,071 "	11.5 "
1925	728,005	75,884 "	11.6 "
1926	836,794	108,789 "	14.9 "
1927	945,672	108,878 "	13.0 "
1928	1,070,664	124,992 "	13.2 "
1929	1,188,929	118,265 "	11.0 "
1930	1,232,486	43,557 "	3.7 "
1931	1,200,907	31,579 Decrease	2.6 Decrease
1932	1,114,503	86,404 "	7.2 "
1933	1,082,957	31,546 "	2.8 "
1934	1,129,532	46,575 Increase	4.3 Increase
1935	1,176,116	46,594 "	4.3 "
1936	1,240,124	64,008 "	5.4 "
1937	1,319,702	79,578 "	6.4 "

Note: Includes motorcycles, road tractors and government and municipal motor vehicles.

Canadian Car* Registrations, 1931-1937

(Compiled by Canadian Automobile Chamber of Commerce)

Province	1931	1932	1933	1934	1935	1936	1937
Pr. Ed. Isl.	6,917	6,181	6,177	6,409	7,420	6,746	6,993
Nova Scotia	36,431	33,798	33,133	33,443	35,820	37,478	39,900
N. Brunswick	29,233	24,030	22,890	24,614	26,195	27,731	29,937
Quebec	146,266	135,594	130,658	135,441	139,497	148,374	161,317
Ontario	489,713	462,923	453,314	470,617	489,610	514,211	541,802
Manitoba	64,940	61,420	58,340	59,285	59,470	62,730	65,747
Saskatchewan	91,846	75,685	69,503	74,050	75,727	81,519	83,905
Alberta	79,225	72,079	71,400	73,444	76,882	79,538	81,713
Br. Columbia	79,423	73,516	71,439	73,997	78,999	84,062	91,549
Yukon	125	129	121	127	134	140	149
Total	1,024,119	945,355	916,953	950,428	989,754	1,041,529	1,103,012

*Includes taxicabs.

Canadian Truck Registrations, 1931-1937

(Compiled by Canadian Automobile Chamber of Commerce)

Province	1931	1932	1933	1934	1935	1936	1937
Prince Ed. Isl.	837	801	785	797	811	886	1,018
Nova Scotia	7,167	7,355	7,310	7,489	8,132	8,701	10,148
New Brunswick	4,339	4,014	3,952	4,480	5,032	5,671	6,834
Quebec	31,269	30,136	29,354	30,085	31,147	33,254	36,600
Ontario	72,557	68,674	67,039	71,628	74,466	76,015	82,116
Manitoba	10,290	10,150	10,400	11,145	11,190	13,210	15,113
Saskatchewan	16,175	15,590	15,231	17,411	19,065	20,751	21,159
Alberta	15,542	14,799	14,710	15,925	16,988	17,930	18,721
British Columbia	18,509	17,526	17,115	18,024	19,412	22,017	24,792
Yukon	73	103	108	121	129	160	180
Total	176,758	169,148	166,004	177,105	186,372	198,595	216,690

(Includes road tractors, buses, trucks, ambulances, fire trucks, hearses and motorcycles.)

Production of Motor Vehicles in Canada by Months, 1929-1937

(Compiled by Canadian Automobile Chamber of Commerce)

Month	1929	1930	1931	1932	1933	1934	1935	1936	1937
Jan.	21,501	10,388	6,496	3,731	3,358	6,904	10,607	13,302	19,583
Feb.	31,287	15,548	9,864	5,477	3,298	8,571	18,114	13,268	19,707
Mar.	40,621	20,730	12,993	8,318	6,632	14,180	21,975	18,021	24,901
Apr.	41,901	24,257	17,159	6,810	8,255	18,363	24,123	24,951	17,081
May	31,559	24,672	12,738	8,221	9,396	20,161	20,702	20,006	23,458
June	21,492	15,090	6,835	7,112	7,323	13,905	15,745	16,400	23,841
July	17,461	10,188	4,220	7,472	6,540	11,114	13,069	10,475	17,941
Aug.	14,214	9,792	4,544	4,067	6,079	9,904	7,692	4,660	10,742
Sept.	13,817	7,957	2,646	2,342	5,808	5,579	5,323	4,655	4,417
Oct.	14,523	4,541	1,440	2,923	3,682	3,780	8,313	5,361	8,103
Nov.	9,424	5,407	1,247	2,204	2,291	1,697	13,496	10,821	16,574
Dec.	4,825	4,802	2,377	2,112	3,190	2,694	13,775	20,248	21,115
Total	262,625	153,372	82,559	60,789	65,852	116,852	172,934	162,159	207,463

Canadian Truck Output by Capacities, 1935, 1936 and 1937

Commercial Cars, Including Trucks, Buses and Chassis

	1935	1936	1937
¾ ton and less	9,496	14,593	22,348
1 ton and less than 1½	875	1,362	1,155
1½ tons and less than 2	13,179	5,413	11,996
2 tons and less than 2½	8,429	9,732	13,485
2½ tons and less than 3½	1,069	2,452	5,242
3½ tons and 4½ tons inclusive	142	54	57
5 tons	10	27	19
5½ tons and over	13	36	30
Special (ambulances, hearses, etc.)	2	....	....
Buses (including truck chassis for bus use)	38	121	85
Total	33,253	33,790	54,417

Who's Who

(Continued from Previous Page)

Trailer Sales, 5955 Woodward ave. **Adv. Agcy.**—Staake & Schoonmaker, Kalamazoo, Mich.

KRAETKE BROTHERS., Inc., 2493 E. Grand blvd., Detroit, Mich. Designers and builders of gauges, jigs, fixtures, special machinery. William L. Kraetke, pres. and treas.; Margaret Kraetke, vice-pres.; Ernest F. Kraetke, secy.; C. E. Collins, engr.; Herbert J. Poosch, pur. agt.

KRAMER, H. & CO., 1347-59 W. 21st st., Chicago, Ill. Ingots made of brass, bronze, nickel silver, aluminum bronze and aluminum alloy, zinc base die cast alloys, babbitt metals, special alloys. H. Kramer, pres. and treas.; I. Kaden and L. Chapman, vice-pres.; H. A. Skolnik, secy.; C. O. Thieme, chief metallurgist; Wm. Romanoff, tech. supt.; Dave Berman, plant supt.; G. P. Halliwell, dir. of research. **Det. Rep.**—Adam Hope Co., 623 Cass ave.

K-W CORP., 912 Baltimore ave., Kansas City, Mo. Graphite, Engine Tune, Engine "Shampu." N. P. Rowe, pres.; E. T. Chester, secy.-treas.

K W IGNITION CORP., 1767 E. 27th st., Cleveland, O. Tungsten rod and contacts, tungsten powder, emergency coils, vibrating type coils, transformers, magnetos, tractor lighting outfits. A. F. Williams, pres.; A. Edmund Hanson, vice-pres. and sales mgr.; R. J. Eiseman, engr.; C. W. Dietz, pur. agt. and secy.-treas.

KWICK-KUT MFG. CO., Inc., 3828 Arsenal st., St. Louis, Mo. Electrical tire grooving tools, tube and valve stem vulcanizers. George Schattgen, pres.; Clifford F. Boyer, vice-pres. and gen. mgr. **Adv. Agcy.**—Oakleigh R. French & Associates, St. Louis, Mo.

KYSOR HEATER CO., Haynes st., Cadillac, Mich. Hot water heating equipment for buses, automatic air-operated radiator shutters, ventilating blowers, thermostatic engine alarms. W. A. Kysor, pres. and gen. mgr.; E. M. Vehmeyer, vice-pres.; Solon W. Webb, treas.; D. J. Mohl, pur. agt. and secy.

L

LADISH DROP FORGE CO., Cudahy, Wis. Forgings, rough and machined. H. W. Ladish, chmn. and pres.; V. F. Braun, vice-pres. and gen. mgr.; F. A. Ladish, vice-pres. and pur. agt.; R. M. Foltz, vice-pres. and sales mgr.; C. C. Gladson, secy.; C. H. Lowe, supt.; H. G. Wentz, pur. agt. **Det. Rep.**—F. E. Ladish, Cudahy, Wis.

LAIDLAW CO., Inc., 16 W. 60th st., New York, N. Y. Upholstery and seat cover cloth, top covering, carpets. William R. Laidlaw, pres. **Det. Rep.**—H. H. Knepper, 4835 Woodward ave.
(See display advertising index)

LAKE CITY MALLEABLE CO., 5000 Lakeside ave., Cleveland, O. Malleable castings, railing posts, ribbed washers. J. H. Redhead, pres.; C. Beattie, gen. mgr.; R. C. Shurmer, sales mgr.; E. L. Kremer, adv. mgr.; R. J. Mueller, engr.; J. J. Witenhafer, pur. agt. **Det. Rep.**—C. R. Harvey, 4011 New Center bldg. **Adv. Agcy.**—Lake City Mall. Co., Cleveland, O.

LAMINATED SHIM CO., Inc., 21-24 44th ave., Long Island City, N. Y. Shims and shim stock, laminum and plain, spacers, stampings. C. N. Aborn, pres.; Richard Seipt, sales mgr.; Owen C. Jones, adv. mgr.; E. B. Nisbet, pur. agt. and treas. **Det. Rep.**—Clarence R. Harvey, 411 New Center bldg. **Adv. Agcy.**—George E. Hatch Advertising, 10 E. 40th st., New York, N. Y.

LAMSON & SESSIONS CO., 1971 W. 85th st., Cleveland, O. Bolts, nuts, cap screws, cotters, special cold or hot upset parts. Geo. S. Case sr., chmn.; Roy H. Smith, pres.; J. F. Donahue, vice-pres., sales mgr.; I. L. Jennings, vice-pres.; A. E. R. Peterka, asst. to v.p. and adv. mgr.; H. H. Winterberg, secy.; I. L. Jennings, treas.; Henry Keske, comptr.; Ralph Wiemer, asst. sales mgr.; Harold McMahon, gen. mgr. Cleveland plant; A. E. Buelow, engr.; Geo. Hinds, pur. agt.; Carl Harvey, chief metallurgist; Robt. G. Patterson, merch. dir.; Geo. S. Case jr., vice-pres., gen. mgr. Birmingham plant; Wm. Olsen, vice-pres., gen. mgr. Chicago plant. **Det. Rep.** — Harry Lapoterie, General Motors bldg. **Adv. Agcy.**—John C. Stephan, Leader bldg., Cleveland, O.

LANDIS TOOL CO., Waynesboro, Pa. Precision grinding equipment. J. E. Frantz, pres.; J. H. Stoner, vice-pres.; M. F. Frantz, treas.; H. E. D. Gray, gen. mgr.; R. F. Ingram, sales mgr., secy.; F. W. Pensinger, adv. mgr.; H. E. Balsiger, engr.; W. W. Strite, pur. agt. **Det. Rep.**—Frank Greiner, 5928 Second blvd.

LANGSENKAMP - LINKERT CARBURETOR CO., 1200-1266 Shelby st., Indianapolis, Ind. Carburetors. H. W. Linkert, pres., gen. mgr.; S. R. Hawkins, vice-pres., sales mgr.; H. Langsenkamp jr., secy.; H. Langsenkamp sr., treas.; E. J. Schuster, pur. agt.

LANTZ-PHELPS CORP., 420 Linden ave., Dayton, O. Exhaust gas analyzers, electric circuit testers, motor vacuum testers, gasoline mileage testers, valve leakage testers, electric tachometers. W. J. Lantz, pres., gen. mgr., treas.; C. H. Phelps, vice-pres., engr.; F. E. Hershey, secy.; O. Weller, pur. agt.; **Adv. Agcy.**—Hugo Wagenseil & Associates, Dayton, O.

LAS-STIK MFG. CO., Wayne & B sts., Hamilton, O. Polishing cloths, inner tube patches, wood putty, heat gun. Louis C. Sohngen, pres.; Martin J. Spoerl, vice-pres.

LATEX FIBER INDUSTRIES, Inc., Beaver Falls, N. Y. Panel facings, floor coverings for trunks, fireproof panel board, cut gaskets and washers. H. S. Lewis, pres.; Eric Burkman, secy.; A. F. Owen, gen. mgr.; K. F. Larkin, pur. agt. **Det. Rep.**—R. R. Clarkson, 6600 E. Jefferson ave. **Adv. Agcy.**—Campbell-Ewald Co., 1790 Broadway, New York, N. Y.

LATHAN CO., Inc., S. Linden ave., South San Francisco, Calif. Power brakes. A. S. Lathan, pres.; S. R. Walker, vice-pres.; J. E. Lathan, secy.-treas.; M. R. Musser, sales mgr.; C. A. Christensen, engr., pur. agt. **Det. Rep.**—S. R. Walker, 477 Selden ave. **Adv. Agcy.**—Lyon Advertising Agency, Rialto bldg., San Francisco, Calif.

LAVINE GEAR CO., 634 E. Keefe ave., Milwaukee, Wis. Steering gears for tractors, trucks and automobiles. Herman A. Uihlein, pres.; B. W. Twyman, vice-pres., gen. mgr.; M. O. Andrae, secy.; H. A. Uihlein, treas.; B. T. Taylor, sales and adv. mgr.; T. W. Giese, engr.; E. D. Cadwell, pur. agt. **Adv. Agcy.**—Barnes Advertising Agency, Milwaukee, Wis.

LE BLOND, R. K. MACH. TOOL CO., Madison and Edward rds., Cincinnati, O. Lathes, cutters, grinders, Regal lathes. R. K. LeBlond, pres.; R. E. LeBlond, vice-pres., gen. mgr.; John LeBlond, vice-pres.; W. E. Groene, vice-pres., engr.; E. C. Schultz, treas.; H. C. Pierle, sales mgr., secy.; W. L. Rybolt, adv. mgr.; Wm. McK. Reis, pur. agt. **Det. Rep.** — Peninsular Mchy. Co., 2921 E. Grand blvd. **Adv. Agcy.**—Perry-Brown, 15 E. 8th st., Cincinnati, O.

LE BLOND-SCHACHT TRUCK CO., 8th and Evans sts., Cincinnati, O. Motor trucks. R. K. LeBlond, chmn.; Harold R. LeBlond, pres., sales mgr., adv. mgr.; E. G. Schultz, vice-pres., treas.; W. R. Dallmann, secy.; W. E. DeWitt, gen. mgr.; R. C. Nepper, engr.; A. W. Niederhelman, pur. agt. **Adv. Agcy.**—Keeler & Stites Co., Carew Tower, Cincinnati, O.

LEE, K. O. & SON CO., Aberdeen, S. D. Arc welders, drill chucks, reamer grinders, valve refacers, seat grinders, ring insert tools, connecting rod aligners, speed reducers, wheel dressers, chuck centers, reamer drives. K. O. Lee, pres.; Theo. Purvis, vice-pres.; C. C. Lee, secy.-treas., gen. mgr.; Louis Anderson, sales mgr.; Emil Meyers, pur. agt.

LEECE-NEVILLE CO., 5363 Hamilton ave., N.E., Cleveland, O. Electrical cranking motors, generators, regulators, switches, etc. B. M. Leece, chmn., pres.; P. H. Neville, vice-pres.; Geo. S. Cole, gen. mgr., secy.-treas.; Arthur A. Skinner, sales and adv. mgr.; B. M. Leece, engr.; D. M. Evans, pur. agt. **Det. Rep.**—Auto Electric & Service Corp., 90 Selden ave.

LEE RUBBER & TIRE CORP., Conshohocken, Pa. Tires and tubes; rubber accessories. John J. Watson, chmn., pres.; A. A. Garthwaite, vice-pres., gen. mgr.; O. S. Dollison, W. W. Benner, vice-pres.; Henry Hopkins jr., secy.; E. W. McCreery, sales mgr.; Geo. H. Duck, adv. mgr.; E. E. Leach, engr.; W. E. Hansen, pur. agt.; H. L. Pettingell, chge of sales. **Det. Rep.**—Highland Oil Co., 15091 LaSalle st., and Wilson Oil Co., 3307 29th st. **Adv. Agcy.**—Benjamin Eshleman Co., 260 S. Broad st., Philadelphia, Pa.

LEIBING AUTOMOTIVE DEVICES, Inc., 5725 Mt. Elliott, Detroit, Mich. Governors, degassers. R. D. Fageol, pres.; W. E. Leibing, vice-pres.; R. F. Lapthorne, secy.-treas.; B. F. Clancy, engr. **Adv. Agcy.**—Aarons, Sill & Caron, Detroit.

LEMPCO PRODUCTS, Inc., Dunham rd., Bedford, O. Axle shafts, gears, brake drums, boring bars, piston grinders, hydraulic presses, line boring machines, brake drum lathes and grinders, degreasers, pressure plate grinder. James F. Strnad, chmn., pres.; John Y. Blozek, vice-pres.; P. Hronek, treas.; Frank L. Wolfe, sales mgr.; Frank Schwab, adv. mgr.; Verne Roy, engr.; J. H. Gulick, pur. agt. **Det. Rep.**—Art Bernstien, 443 E. Fort st.

LEONARD SPARK PLUG CO., Inc., 148 Summit st., Newark, N. J. Spark plugs. Edward Haas, chmn., gen. mgr.; E. E. Rieck, vice-pres.; T. F. Cannan, sales and adv. mgr.; D. M. Leonard, pur. agt., secy.

LETERSTONE SALES CO., 2515 Wabash ave., Chicago, Ill. Roller bearings, radio aerials, spring bushings, replacement parts. B. J. Edelstone, pres.; L. D. Leterman, vice-pres., secy.-treas.; L. J. Murphy, gen. mgr.; C. S. Schmidt, sales mgr.; Ray Brown, adv. mgr.; Art Walters, engr.; L. J. Murphy, pur. agt. A. E. Sweet, pur. agt and mgr. tractor parts div.

LE TOURNEAU, R. G. Inc., Foot of Grant st., Peoria, Ill. Cranes, scrapers, drag scrapers, power control units. R. G. LeTourneau, pres.; Ray Peterson, vice-pres.; C. C. Case, asst. secy.; D. M. Burgess, domestic sales mgr.; G. R. Huffman, adv. mgr.; Ken F. Park, engr.; H. B. Miller, pur. agt.; J. F. Johannsen, foreign sales mgr.

LIBBEY-OWENS-FORD GLASS CO., Toledo, O. Sheet glass, polished plate glass, colored plate glass, tempered plate glass, color fused tempered plate glass, heat-absorbing plate glass, structural glass; also distribute figured and wire glass products of Blue Ridge Glass Corp., Kingsport, Tenn. John D. Biggers, pres.; D. H. Goodwillie, exec. vice-pres.; H. H. Baker, vice-pres., secy.; G. P. MacNichol jr., vice-pres. in chge. of sales; R. H. Taylor, treas.; C. E. Husted, C. A. Schmettau, vice-pres. **Det. Rep.** — R. G. Milroy and H. W. Sherer, 610 Fisher bldg. **Adv. Agcy.**—United States Adv. Corp., 240 Huron st., Toledo, O.
(See display advertising index)

(Continued on Next Page)

WORKING QUIETLY, unostentatiously, our research department has left behind it a sparkling record of performance. Proudly we acknowledge the contribution it has made to our success—its record founded on the diligent application of scientific principles to customer problems.

By dovetailing research work with that of our sales department, our entire organization is thus equipped to apply itself to the specific needs of anyone in the sheet metal trades. And by strict application to ideals of craftsmanship and of service, we have built for ourselves a record—"Once a customer, always a customer."

Our complete line includes six regular, alloyed and electric furnace gray irons—headed by LEKTROKAST, the finest electric furnace iron possible to produce. Some one of these irons is exactly suited to *your* specific requirements.

When next you order castings for dies, we would appreciate an opportunity for our sales and engineering representatives to talk with you—without, of course, any obligation to you.

DETROIT GRAY IRON LEKTROKAST FOUNDRY COMPANY

DETROIT GRAY IRON FOUNDRY COMPANY

Foot of Iron Street — Detroit, Michigan

ALSO MANUFACTURERS OF

CHARCOAL IRON — NICKEL CHROME IRON... — VANADIUM IRON — HI-TEST IRON — REGULAR DIE

Who's Who

(Continued from Previous Page)

LIBERT MACHINE CO., 324 N. Roosevelt st., Green Bay, Wis. Sheet metal shears. M. A. Libert, pres., gen. mgr.; Z. Libert, vice-pres.; E. J. Libert, secy.-treas.; C. R. Daniels, sales mgr. **Det. Rep.**—Jos. T. Ryerson & Son, Inc. **Adv. Agcy.**—R. C. Breth, Inc., Green Bay, Wis.

LIGGETT SPRING & AXLE CO., Box 200, Monongahela, Pa. Trailer axles, chassis springs. J. S. Skelly, pres.; W. B. Cardozo, vice-pres.; J. L. Cochran, secy.-treas., pur. agt. **Det. Rep.**—J. A. Schroeder, 3087 W. Grand blvd.

LINCOLN ELECTRIC CO., 12818 Coit rd., Cleveland, O. Arc welders, electrodes, accessories, welding supplies. J. C. Lincoln, chmn., treas.; J. F. Lincoln, pres., gen. mgr.; C. M. Taylor, vice-pres., sales mgr.; A. F. Davis, vice-pres., adv. mgr.; J. W. Meriam, vice-pres., secy.; G. G. Landis, engr.; C. W. Roehl, pur. agt. **Det. Rep.**—F. M. Maichle, 10228 Woodward ave. **Adv. Agcy.**—Griswold Eshleman Co., Terminal Tower, Cleveland, O.

LINCOLN ENGRG. CO., 5701 Natural Bridge ave., St. Louis, Mo. Lubrication equipment, grease guns, fittings. F. S. Barks, pres.; A. P. Fox, vice-pres. in chge. of prod.; Foster Holmes, vice-pres. in chge. of sales; Geo. LaRue, secy.; Jack L. Carmitcheal, sales mgr.; J. W. Smothers, adv. mgr.; L. C. Rotter, engr.; D. K. Howell, pur. agt. **Det. Rep.**—J. C. Hurley, Detroit Mgr., 1171 Beaufait ave.

LINDE AIR PRODUCTS CO., 30 E. 42nd st., New York, N. Y. Carbide, acetylene, welding and cutting apparatus, welding supplies, acetylene generators, oxygen manifolds, machines, valves, paint burners, hose connections, gauges, nozzles, adaptors, tanks.

LINENDOLL CORP., 813 N. Franklin st., Chicago, Ill. Differential and transmission flushing equipment, hot water heaters, defrosting equipment, thermostats, valve stem packing, piston skirt expanders, piston cam-peening machine. C. H. Hoper, pres.; H. A. Harmon, sales mgr.; W. Tucker, engr.; B. Paxton, pur. agt. **Det. Rep.**—S. Hamilton, 22612 Beech st., Dearborn, Mich.

LINK-BELT CO., 519 N. Holmes ave., Indianapolis, Ind. Silent and timing chains, finished steel roller chain, complete line of elevating, conveying and power transmission equipment. Alfred Kauffman, pres.; J. S. Watson, vice-pres., gen. mgr.; Max H. Hurd, G. L. Morehead, vice-pres.; R. W. Yerkes, secy.-treas.; J. S. Holl, adv. mgr.; H. S. Pierce, engr.; F. C. Thompson, pur. agt. **Det. Rep.** — L. W. Longan, 5938 Linsdale ave.

LINN TRAILER CORP., 443 Chestnut st., Oneonta, N. Y. House and commercial trailers, motorized sales coaches. Arthur R. Perkins, pres.; Grace G. Linn, vice-pres.; Marie A. Straw, secy.-treas.

LION CHAIN CO., Inc., 1301 S. Clinton st., Chicago, Ill. Tire chains and accessories, motor heaters. John D. Carmody, pres., treas.; Fredrick Ullman, secy.; Fred S. Schildt, asst. to pres. **Det. Rep.**—H. B. Burr, 1010 Stephenson bldg. **Adv. Agcy.**—Aurther Mogie, Bell bldg., Chicago, Ill.

LION PRODUCTS CO., 7 Liberty Square, Lynn, Mass. Electric windshield defrosters, wiper blades, dress-up spokes, vision mirrors, Max Zaiger, pres., treas. **Det. Rep.**—Spillman Co., 6432 Cass ave. **Adv. Agcy.**—Franklin Advertising Agcy., 234 Boylston st., Boston, Mass.

LIPE, W. C. Inc., Syracuse, N.Y. Clutches, production lathes, gear tooth chamfering machines. H. F. Hodgkins, pres., gen. mgr.; Gould Allen, sales mgr.; E. R. Fish, engr.; J. D. Williams, asst. mgr. **Det. Rep.**—Gould Allen, 417 Southfield rd., Birmingham, Mich.

LIQUID VENEER CORP., 375 Ellicott st., Buffalo, N. Y. Radiator cleaner, rustkill, liquid veneer auto polish, top dressing, gasket cement, gasket shellac compound, liquid shellac. Oliver F. Cabana, pres.; Elmer A. Cabana, Fred D. Morgan, Fred H. Wood, vice-pres.; C. B. McCollum, treas.; Frank Collins, sales mgr.; Thomas B. Healy, pur. agt., secy. **Adv. Agcy.**—Lloyd Mansfield, Inc., Dun bldg., Buffalo, N. Y.

LISLE CORP., 807 E. Main st., Clarinda, Ia. Cylinder ridge reamer, valve seat grinder, cylinder hone, pin hole hone, connecting rod aligner and magnetic drain plugs. C. V. Lisle, chmn., gen. mgr.; H. H. Lisle, J. Read Arthur, vice-pres.; A. A. Cambre, sales and adv. mgr.; T. E. Brooks, engr., pur. agt. **Adv. Agcy.**—Fairall and Co., Des Moines, Ia.

LITTELL, F. J. MACHINE CO., 4127 Ravenswood ave., Chicago, Ill. Roll, dial, hopper, magazine and hydraulic feeding and straightening machines, coil cradles and air blast valves. E. J. Littell, pres.; F. M. Littell, secy.; E. M. Lattin, pur. agt. **Det. Rep.**—F. M. Littell, 6432 Cass ave. **Adv. Agcy.**—J. M. Haggard, 141 W. Jackson blvd., Chicago, Ill.

LITTLE GIANT PRODUCTS, Inc., 1530 N. Adams, Peoria, Ill. Tandem attachments, frame extensions, hand hoists for trucks, wrecking cranes. Walter J. Becker, vice-pres., gen. mgr.; M. M. Pflederer, treas.; Ray Schaab, engr. **Adv. Agcy.**—Mace Adv. Agency, Peoria, Ill.

LOGAN GEAR CO., THE, also subsidiary, Bingham Stamping & Tool Division, 1062 Post st., Toledo, O. Tubular axles, ring gears and pinions, automobile jacks, emergency hand brake lever assemblies, metal stampings. L. H. Gould, exec. vice-pres.; F. H. Landwehr, secy.-treas.; S. C. Earley, plant mgr.; L. E. Yunker, sales mgr.; C. S. McCarthy, engr.; F. W. Heidtman, pur. agt. **Det. Rep.**—Arch Warner, 419 New Center bldg.

LONEY, HARLEY C. CO., 16883 Wyoming ave., Detroit, Mich. Wheel balancing weights, machines and door locks. H. C. Loney, chmn., sales mgr.; J. W. Hume, vice-pres., gen. mgr.; R. A. Schrock, secy.; M. J. Hume, treas.; Paul Hatch, engr.; William Bassett, pur. agt. **Adv. Agcy.**—Rolfe C. Spinning, Inc., Detroit, Mich.

LONG MFG. DIV., Borg-Warner Corp., 12501 Dequindre st., Detroit, Mich. Clutches and radiators, condensers and evaporators, industrial heating and cooling units. J. L. Dryden, pres., gen. mgr.; W. F. Burgess, secy.-treas.; L. J. Loranger, sales and adv. mgr.; F. B. Herz, engr.; G. H. Thomas, pur. agt.; R. B. Scott, pur. agt.; E. E. Wemp, eng. counsel. **Adv. Agcy.**—F. M. Randall Co., Detroit, Mich.

LORD MFG. CO., 1635 W. 12th st., Erie, Pa. Rubber engine mountings, rubber joints. H. C. Lord and B. M. Hartman, partners; Thomas Lord, gen. mgr.; T. L. Yates, engr.; J. MacArthur, pur. agt. **Adv. Agcy.**—Davies & McKinney, Erie, Pa.

LUCE MFG. CO., 700 E. South st., Lansing, Mich. Truck and panel bodies. Bert M. Fox, gen. mgr.; Clarence W. Wahl, engr.; S. C. Surratt, pur. agt.

LUDLUM STEEL CO., Watervliet, N. Y. Electric furnace products, high speed tool steels, alloy die steels, hot-rolled steels, heat and corrosion resistant steels, forgings and castings, ball and bearing steel, magnet steel, hollow drill and hot work steels, cold-rolled stainless and carbon steel strip. H. G. Batcheller, pres.; A. F. Dohn, vice-pres. of sales; F. B. Lounsberry, vice-pres. of operations; Neile F. Towner, secy.; I. J. Morris, treas. and asst. secy.; C. B. Templeton, adv. mgr.; Knut Leander, engr.; F. S. Quick, (Watervliet), L. H. Bittner (Dunkirk), pur. agt. **Det. Rep.**—H. I. Askew, dist. mgr., 1637 E. Grand blvd. **Adv. Agcy.**—Wm. B. Remington, Inc., 21 Besse Pl., Springfield, Mass.

LYCOMING MFG. CO., 652 Oliver st., Williamsport, Pa. Internal combustion engines, heaters, grey iron castings and production machining. John K. MacGowan, chmn.; E. D. Herrick, pres.; C. N. Tull, vice-pres.; H. D. Stuempfle, secy.-treas.; L. H. Crafts, sales mgr.; A. W. Rickenbach, engr.; W. J. Starr, pur. agt. **Adv. Agcy.**—George N. Wallace Co., 272 Madison ave., New York, N. Y.

LYDON-BRICHER MFG. CO., 2500 University ave., St. Paul, Minn. Defrosting and ventilating fans, direct current motors. H. D. Bricher, pres., gen. mgr.; Jerry Keenan, vice-pres.; H. D. Bricher, treas.; L. C. Bricher, sales mgr., secy.; C. A. Schmidt, engr. **Det. Rep.**—Roy C. Noll, 111 Putnam st. **Adv. Agcy.**—Mitchell Advertising Agency, Minneapolis, Minn.

LYON, Inc., 197 S. Waterman, Detroit, Mich. Wheel trim rings, discs. G. A. Lyon, chmn., pres.; R. E. Lyon, vice-pres.; B. M. Short, vice-pres., gen. mgr.; S. D. Bullock, pur. agt.

M

MACHINE SPECIALTY CO., 1200 N. Main st., Ann Arbor, Mich. Wrist and king pins, shackle bolts, other hardened and ground parts. E. O. Wenk, pres.; H. A. Wenk, vice-pres., gen. mgr.; M. J. McCarthy, vice-pres., sales mgr.; F. E. Royce, secy.-treas.

MACK TRUCKS, Inc., 34th st. and 48th ave., Long Island City, N. Y. Trucks, tractors, semi-trailers, buses. E. C. Fink, pres.; F. F. Staniford, vice-pres., sales mgr.; L. C. Josephs jr., vice-pres., chief engr.; J. E. Savacool, vice-pres, compt.; C. W. Haseltine, secy.-treas.; M. C. Morine, sales prom. mgr.; E. M. Post jr., adv. mgr.; E. R. Wille, pur. agt. **Det. Rep.**—C. L. Brosseau, 5133 Grand River ave. **Adv. Agcy.**—McCann-Erickson, Inc., New York, N. Y.

(See display advertising index)

MACKLIN CO., Jackson, Mich. Grinding wheels. T. J. McIntyre, pres.; B. F. McIntyre, vice-pres.; C. E. Etheridge, secy.-treas. R. B. Howlett, adv. mgr., pur. agt.; W. V. Blake, engr. **Det. Rep.**—N. H. Balz, 2842 W. Grand blvd. **Adv. Agcy.**—Guy C. Core Co., Jackson, Mich.

MALL TOOL CO., 7740 S. Chicago ave., Chicago, Ill. Flexible shaft grinders, polishing machines, buffing machines, portable electric drills, portable electric saws, flexible shaft diesinking machines, rotary files. A. W. Mall, pres., gen. mgr.; W. H. Sanders, secy.-treas.; M. Rehnquist, adv. mgr.; W. A. Selander, engr.; J. W. Innes, pur. agt. **Det. Rep.**—J. H. Hutton, 8508 Gratiot ave.

MALLORY, P. R. & CO., Inc., 3029 E. Washington st., Indianapolis, Ind. Welding electrodes, electrical contacts, special forms of tungsten and molybdenum, dry disc rectifiers, dry electrolytic condensers, variable resistors, auto radio vibrators, small and special electrical switches. P. R. Mallory, pres.; J. E. Cain, vice-pres., gen. mgr.; Ray F. Sparrow, vice-pres.; J. A. Weiger, vice-pres., sales mgr.; George Fotheringham, secy.; P. Newton Cook, adv. mgr.; J. S. Williams, engr.; Geo. C. Mercer, pur. agt.; M. E. Hamilton, comptr. **Det. Rep.**—J. D. Tebben, 2449 E. Grand blvd. **Adv. Agcy.**—Aitkin-Kynett, 1400 S. Penn Sq., Philadelphia, Pa.

MALLORY ELECTRIC CORP., Cloverdale and Fullerton aves., Detroit, Mich. Ignition equipment, carburetors. M. Mallory, pres.; George M. Holley, vice-pres.; J. G. Hodgson, secy.-treas.; P. M. Cooper, pur. agt.

MANLEY MFG. DIV., American Chain & Cable Co., Inc., York, Pa. Hydraulic and screw presses, car washers, wrecking cranes, hydraulic and mechanical jacks, tire inspectors and changers, engine stands, auto lifts, air compressors, vises, miscellaneous automotive service station equipment, brake drum truing machines, headlight tester, paint spray equipment, portable lights, welding wire, pressure lubricators. W. B. Lashar, chmn.; W. T. Morris, pres.; W. F. Wheeler, A. P. Van Schaick, C. G. Williams, G. C. Moon, vice-pres.; W. M. Wheeler, secy.; O. R. McDonald, sales mgr.; J. O. Lashar, adv. mgr. **Adv. Agcy.** — Reincke-Ellis-Younggreen & Finn, 520 N. Michigan ave., Chicago, Ill.

MANSFIELD TIRE & RUBBER CO., Mansfield, O. Tires and tubes. G. W. Stephens, pres., gen. mgr.; P. H. Ober, vice-pres., asst. gen. mgr.; H. B. Soulen, vice-pres. in chge. of mfg.; J. E. LaDow, secy.; C. L. Willsey, treas.; J. S. Wainright, gen. sales mgr.; H. F. Webster, sales mgr.; Carl B. Gibson, adv. mgr.; H. J. Paulsen, engr.; J. A. Nichols, pur. agt.

MANUFACTURER'S BELT HOOK CO., 1301-1313 W. Congress st., Chicago, Ill. Rivets, belt hooks, couplings, belt lacing, belt punches, belt makers' tools. C. A. Gerlach, pres., gen. mgr.; C. V. Gerlach, pur. agt. **Det. Rep.**—W. R. Wilson, 6460 Kercheval ave.

MAREMONT AUTOMOTIVE PRODUCTS, Inc., 1625 S. Ashland ave., Chicago, Ill. Automobile springs. M. D. Maremont, pres.; J. R. Cohen, vice-pres.; L. S. Maremont, gen. mgr.; H. E. Wolfson, sales mgr., secy.; R. M. Schutz, adv. mgr.; J. F. Bartuska, engr.; J. M. Comar, pur. agt.

MARION MFG. CORP., 203 Superior st., Marion, O. Automobile and truck towing bars, air circulators, center-pull adapters, etc. C. E. Cox, gen, mgr.

MARLIN-ROCKWELL CORP., 402 Chandler st., Jamestown, N. Y. Ball bearings. Henry K. Smith, chmn.; A. C. Davis, pres., gen. mgr.; E. Snell Hall, vice-pres.; J. H. Walters, secy.-treas.; H. A. Johnson, Eastern sales mgr.; M. E. Monk, Western sales mgr.; C. W. Rauch, adv mgr.; L. A. Cummings, chief engr.; C. A. Berg, pur. agt. **Det. Rep.**—G. C. Warner, 5046 Cass ave.

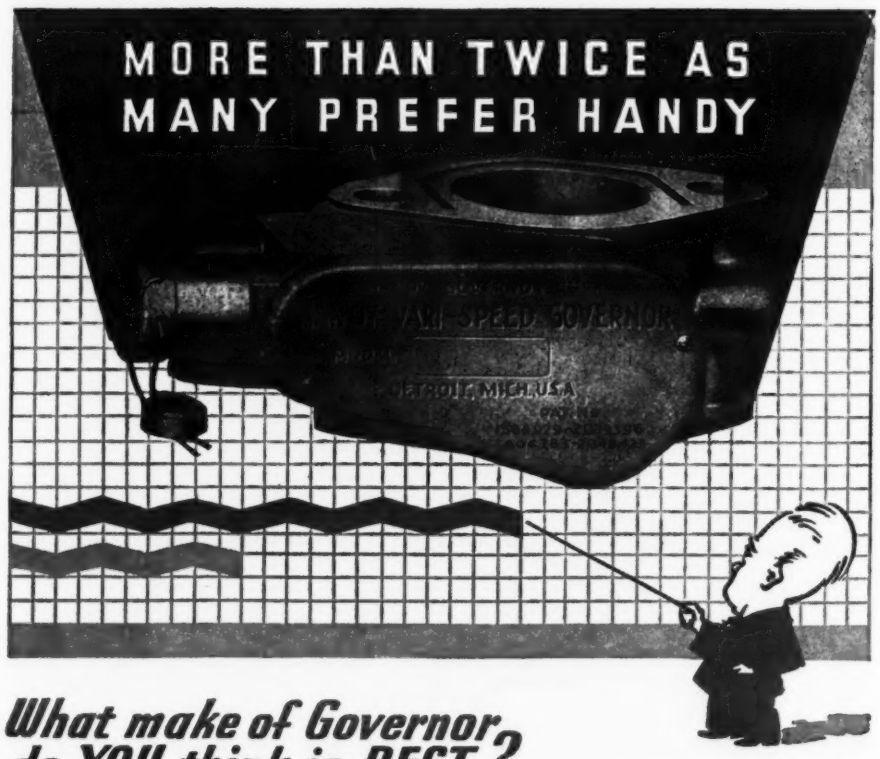
MARMON-HERRINGTON CO., Inc., W. Washington st. at Harding st., Indianapolis, Ind. All-wheel-drive trucks, track-laying tractors. Walter C. Marmon, chmn.; Arthur W. Herrington, pres., chief engr.; Bert Dingley, vice-pres., gen. mgr.; D. I. Glossbrenner, secy.-treas.; Frank L. Alford, asst. secy.-treas.; C. Alfred Campbell, sales and adv. mgr.; D. R. Meo, pur. agt.; R. C. Wallace, asst. chief engr.; E. M. Guinn, traffic mgr. **Adv. Agcy.**—Caldwell-Baker, Inc., Merchants Bank bldg., Indianapolis, Ind.

MARNALL STEEL PRODUCTS, Inc., 501 Fifth ave., New York, N. Y. Steel pits, lifts, etc. R. W. Marshall, pres.; J. A. Forsyth, vice-pres.; Thomas A. Martin, sales mgr.; James Bronis, pur. agt., secy.-treas. **Det. Rep.**—W. M. Hamilton, 22612 Beech st., Dearborn, Mich.

MARQUETTE MFG. CO., Inc., 409 Johnson st., N.E., Minneapolis, Minn. Hydraulic jacks, wrecking cranes, arc welders, steel creepers, etc. H. J. Lange, pres., gen. mgr.; R. B. Niles, vice-pres., pur. agt.; C. M. Akins, vice-pres., engr.; H. S. Petersen, secy.; O. H. Hansen, treas.; G. C. Southerland, sales mgr.; Sam Dickenson, adv. mgr. **Det. Rep.**—R. L. Corbett, 10036 Broad st. **Adv. Agcy.**—David Co., First Nat. Bank bldg., St. Paul, Minn.

MARSHALL ASBESTOS CORP., (subsidiary Bendix Aviation Corp.) box 417, Troy, N. Y. Eclipse brake lining, carburetor gaskets. Furber Marshall, pres., gen. mgr.; W. J. Buettner, vice-pres., treas.; Henry Gosner, secy.; C. W. Butterfield, sales mgr., adv. mgr.; T. R. Stenberg, engr.; H. C. Hodson, pur. agt. **Det. Rep.**—Fred Weyburne, 8-205 General Motors bldg. **Adv. Agcy.**—Roche, Williams, Cunningham, Inc., Chicago, Ill.

(Continued on Next Page)



What make of Governor do YOU think is BEST?

"What make of GOVERNOR do YOU think is BEST?"

A national magazine recently put that question to fleet owners of 35 states.

"Handy" you answered promptly and in gratifying chorus. Your preference for Handy, the governor leader, was MORE THAN TWICE your vote for the nearest also-ran. So states this impartial national survey.

Certainly, poll of truck manufacturers would yield another Handy Governor preference at least equally impressive.

Our Governor Exchange Plan makes it easy for you to equip your whole fleet NOW with Handy Vari-Speed, most widely preferred of all Governors. Ask your Handy Governor Distributor or write direct to us.

HANDY GOVERNOR CORPORATION - DETROIT

(World's Largest Builders of Automotive Governors)

HANDY (Vari-Speed) GOVERNORS

TIME TESTED
McQUAY-NORRIS
PISTON RINGS
PISTONS
PINS
1910 1938
VALVES
BEARINGS
PUMP PARTS
BOLTS-BUSHINGS
PROVEN IN SERVICE

Who's Who

(Continued from Previous Page)

MARTIN CUSTOM-MADE TIRES CORP., 645 Eleventh ave., New York, N. Y. Tires. James Martin, pres.; Frank C. Rogers, vice-pres.; Raymond A. Clark, secy.; George A. Dorman, treas., adv. mgr.; Wm. Mayrick, sales mgr.; Wray Gill, pur. agt.

MARTIN-PARRY CORP., 1320 W. Market st., York, Pa. Predecorated metal wall board, mouldings. F. M. Small, pres.; E. H. Wildasin, treas.; J. J. Fiechter, plant mgr.; W. A. Mayes, engr.; D. E. S. Gotwald, pur. agt.; R. B. Yessler, arch.

MARTIN ROCKING FIFTH WHEEL AND TRAILER CO., Inc., 265 N. Elm st., Westfield, Mass. Trailers, semi-trailers, fifth wheels, pintle hooks. C. H. Martin, pres.; A. T. King, vice-pres., sales mgr.; A. M. Rutzen, gen. mgr., secy.-treas.

MARTIN & SCHWARTZ, Inc., 2933 Main st., Buffalo, N. Y. Computing pumps, gasoline hand pumps and gasoline price signs. William H. Bateman, pres.; David J. Nelson, vice-pres.; F. S. Reitzel, secy.; Frank Cross, treas.; S. F. Rankin, sales mgr.; Charles Pleuthner, engr.; F. J. McDonough, pur. agt.

MARVEL - SCHEBLER CARBURETOR DIV., Borg-Warner Corp., 1910 St. John st., Flint, Mich. Carburetors, diesel fuel oil injectors. C. M. Kaltwasser, pres., gen. mgr.; David Firth, vice-pres.; W. E. Walpole, secy.-treas.; S. W. Gray, director of tractor sales and engineering; Jack Emerson, engr.; C. G. Fox pur. agt. N. M. Hurry, serv. mgr.

MARVEL TRAILER PARTS CO., 19034 Celestine, Detroit, Mich. Couplings and lifting devices for trailers, also windows assemblies. Carl J. Wagner, pres., treas.; Irvin Crago, gen. mgr. **Adv. Agcy.**—Rolfe Spinning, Inc., 5057 Woodward ave., Detroit, Mich.

MASTER PRODUCTS CO., 6400 Park ave., S. E., Cleveland, O. Punch press products, washers, riveting burrs, stampings in any metal. C. G. Walters, pres., treas.; W. A. Bohn, vice-pres.; C. J. Walters, sales mgr., secy.; C. J. McCarthy, pur. agt.

MATHEWS CONVEYER CO., 200 Tenth st., Ellwood City, Pa. Roller, wheel, belt, live-roller, trolley pallet, apron, pusher-bar, drag-chain, ramp, flight and elevating conveyors, hoists, roller spiral, conveyors, open and enclosed spiral chutes, portable conveyors, spring mounted roller conveyers. F. E. Moore, pres.; W. L. Dean, secy.-treas.; J. S. Bowater, asst. secy.-treas.; Lee Sekulski, sales mgr.; W. J. Ramsey, adv. mgr.; M. J. Anderson, chief engr.; C. A. Paul, pur. agt. A. E. Milbrath, supt. **Det. Rep.**—E. A. Smith, field engr., C. E. Jeremias, field engr., room 319, Curtis budg.

MATHER SPRING CO., Wolcott blvd., Toledo, O. Leaf springs. Gordon M. Mather, pres., gen. mgr.; N. E. Hendrickson, vice-pres., engr.; W. H. Bunker, secy.-treas.; George B. Secor, sales mgr., adv. mgr.; M. H. Schreiner, pur. agt.; Philip Hendrickson, fact. mgr. **Det. Rep.**—George B. Secor, 11-255 General Motors bldg. **Adv. Agcy.**—Meldrum & Fewsmith, Inc., Toledo, O.

McALEER MFG. CO., 2431-39 Scotten ave., Detroit, Mich. Polishing products, rubbing compounds, buffing compositions. C. H. McAleer, pres.; A. H. Regener, secy.; L. F. Davis, vice-pres., treas.; A. G. Neubauer, sales mgr., jobbing div.; C. J. Kennedy, sales mgr., fcty. div.; Ernest Hummitch, adv. mgr., pur. agt.; F. A. Weihe jr., engr. **Adv. Agcy.**—Holden, Graham & Clark, 900 Donovan bldg., Detroit, Mich.
(See display advertising index)

McDEVITT, GEORGE A. CO., 444 Madison ave., New York, N. Y. Newspaper publishers' representative. George A. McDevitt, James A. Coveney, Henry A. Slamin, Joseph A. McOwen. **Det. Rep.**—George A. McDevitt Co., New Center bldg.

McGILL MFG. CO., Valparaiso, Ind. Ball and roller bearings. James H. McGill, pres.; W. E. Brownell, secy., sales mgr.; adv. mgr.; C. S. McGill, treas., gen. mgr.; O. V. Cederberg, chief engr.; T. M. Harrold, pur. agt. **Adv. Agcy.**—C. A. Jaqua Co., Grand Rapids, Mich.

McINERNEY SPRING & WIRE CO., Grand Rapids, Mich., and Passaic, N. J. Cushion springs and spring constructions. J. L. McInerney, pres., gen. mgr.; M. L. Keller, vice-pres.; R. E. Ringgenberg, vice-pres., sales mgr.; E. D. Tobin, secy.; M. L. Keller, treas.; C. R. Rowan, engr.; E. L. Jacobitz, Grand Rapids, and P. Wattez, Passaic, N. J., pur. agts. **Det. Rep.**— R. E. Ringgenberg, 911 Fisher bldg.

McKAY CO., 1005 Liberty ave., Pittsburgh, Pa. Tire chains, arc welding electrodes, welding rods. Thomas J. McKay, pres., treas.; Frank A. Bond, vice-pres., sales mgr., secy.; M. R. Peck, vice-pres.; C. E. Briner, pur. agt.; Roy J. Nelson, asst. gen. sales mgr. in chge. of adv. **Det. Rep.**—R. C. Fairlamb, 514 Stephenson bldg. **Adv. Agcy.**—Smith, Hoffman & Smith, Vandergrift bldg., Pittsburgh, Pa.

McKEE GLASS CO., Jeannette, Pa. Headlamp and rear lamp lenses, domelight glasses. M. A. Smith, pres.; D. M. Smith, vice-pres.; Geo. D. Sailer, secy.; D. B. Pilkey, treas, pur. agt.; A. K. Wood, supt. **Det. Rep.**—J. E. McCluney, 836-840 Michigan bldg.

McKINNON INDUSTRIES, Ltd., Ontario st., St. Catharines, Ont. H. J. Carmichael, pres.; W. A. Wecker, vice-pres., gen. mgr.; C. L. Cotton, secy., J. C. Notman, sales mgr.; C. S. Lowe, adv. mgr., A. J. Quinlan, engr., E. B. Vessey, pur. agt. **Adv. Agcy.**—MacLaren Advertising Co., Toronto, Ont.

McLOUTH STEEL CORP., 300 S. Livernois ave., Detroit, Mich. Hot and cold rolled strip steel. Donald B. McLouth, pres.; Merlin A. Cudlip, vice-pres., treas.; Louis E. Moultane, vice-pres., secy. **Adv. Agcy.**—J. L. S. Scrymgeour, 3138 Union Guardian bldg., Detroit, Mich.
(See display advertising index)

McQUAY-NORRIS MFG. CO., 2320 Cooper st., St. Louis, Mo. Piston rings, pistons, piston pins, valve guides, valve springs, valve keepers, valves, water pumps, water pump parts, motor bearings, king bolts and bushings, spring bolts and bushings, cylinder sleeves, tie rod sockets. W. K. Norris, pres.; H. G. Drefs, vice-pres., treas.; A. J. Mummert, vice-pres.; H. W. Knapp, sales mgr., secy.; C. C. Tapscott, adv. mgr.; D. M. Smith, ring engr.; D. M. Crimmins, pur. agt.; R. H. Smith, pur. agt.; J. V. Cassani, cat. mgr.; J. L. Talbott, sales mgr. ind. dept. **Det. Rep.**—H. A. Dick, 8-155 General Motors bldg. **Adv. Agcy.**—D'Arcy Adv. Co., St. Louis, Mo.
(See display advertising index)

McREYNOLDS DIE & TOOL CO., 1234 Mt. Elliott ave., Detroit, Mich. Metal stamping dies. C. S. McReynolds, pres.; K. B. Spaulding, vice-pres.; E. L. McReynolds, secy.-treas.; Jay Bowen, engr. **Det. Rep.**—K. B. Spaulding, 1234 Mt. Elliott ave.

MECHANICAL HANDLING SYSTEMS, Inc., 4600 Nancy ave., Detroit, Mich. Conveyors, auto transport trailers. W. V. Casgrain, pres., treas.; L. J. Bishop, vice-pres.; C. G. Hurd, vice-pres.; J. B. Angell, vice-pres.; E. A. Skae, secy.

MECHANICS UNIVERSAL JOINT DIV., Borg-Warner Corp., 2020 Harrison ave., Rockford, Ill. Universal joints and ring gears. E. C. Traner, pres., gen. mgr.; G. C. Gridley, vice-pres., prod. mgr.; R. R. Rolph, vice-pres., sales mgr.; W. E. Gustafson, asst. secy.-treas.; W. J. Simpson, sales mgr., adv. mgr.; E. B. Anderson, engr.; C. M. Johnson, pur. agt.; C. E. Swenson, consult. engr. **Det. Rep.**—R. R. Rolph, 4-128 General Motors bldg.

MERCK & CO., Inc., Rahway, N. J. Radiator and engine cleaner, cement, upholstery and fabric cleaner. Frederic Rosengarten, chmn.; George W. Merck, pres.; George W. Perkins, vice-pres., treas.; James J. Kerrigan, vice-pres.; O. R. Ewing, secy.; John A. Garvin, sales mgr.; Douglas Wakefield Coutlee, adv. mgr.; John G. Abbott, pur. agt. **Mfg's. Agt.**—Sid Hay, 607 Adelaide st., Fenton, Mich. **Adv. Agcy.**—Chas. W. Hoyt Co., Inc., 551 Fifth ave., New York, N. Y.

METAL AUTO PARTS CO., 1428 W. Henry st., Indianapolis, Ind. Sheet metal stampings, truck cabs and panel bodies, etc. Wm. B. Ansted sr., chmn.; Wm. B. Ansted jr., pres., gen. mgr.; L. E. Clark, vice-pres.; E. E. Weddle, secy.-treas.; C. A. Myers, sales mgr.; R. A. Staudt, engr.; Geo. S. Digel, pur. agt.

METEOR MOTOR CAR CO., Clark ave., Piqua, O. Funeral cars and ambulances. Mrs. Irene H. Wolfe, chmn., vice-pres.; A. H. Boyer, pres.; Myrtle E. Hester, secy.-treas.; John Graham, gen. mgr.; George C. Butsch, sales mgr.; Hermon Earl, engr.; Jack Geyer, pur. agt.; John Bausch, serv. mgr.; Leonard Butsch, supt.

METROPOLITAN BODY CO., Grand st., Bridgeport, Conn. Commercial body and conversion units. Philip Carlson, pres.; Charles Friedman, secy.; William Carlson, treas. **Adv. Agcy.**—Albert Frank-Guenther Law, 131 Cedar st., New York, N. Y.

METAL SPECIALTIES MFG. CO., 3200 Carroll ave., Chicago, Ill. Paint spray equipment, lamp plugs and sockets, and lighting switches. John H. Lee jr., chmn., gen. mgr.; F. P. Einecker, vice-pres., sales mgr.; L. W. Golder, secy.; Irving T. McHenry, treas.; R. M. Lindsay, engr.; A. W. Sorensen, pur. agt.

METALLICOAT SYNDICATE, 24-16 Bridge Plaza, S. Long Island City, N. Y. Metal spray equipment, solder spray gun. F. J. Abbott, gen. mgr.

MEYERCORD CO., 5323 W. Lake st. Chicago, Ill. Window signs, nameplates, truck lettering and designs, decorations. Leonard H. Knopf, pres.; A. O. Johnson, vice-pres., treas.; H. C. Castle, secy., sales mgr.; R. E. Boyer, adv. mgr.; Harry Wagner, pur. agt. **Det. Rep.**—R. E. Shaw, 7310 Woodward ave.

MICHIGAN BUMPER CORP., 740 Ann st., Grand Rapids, Mich. Bumpers, brackets, guards. A. P. Crell, pres., gen. mgr.; M. B. Hammond, vice-pres., engr.; C. A. Woodhouse, secy.-treas.

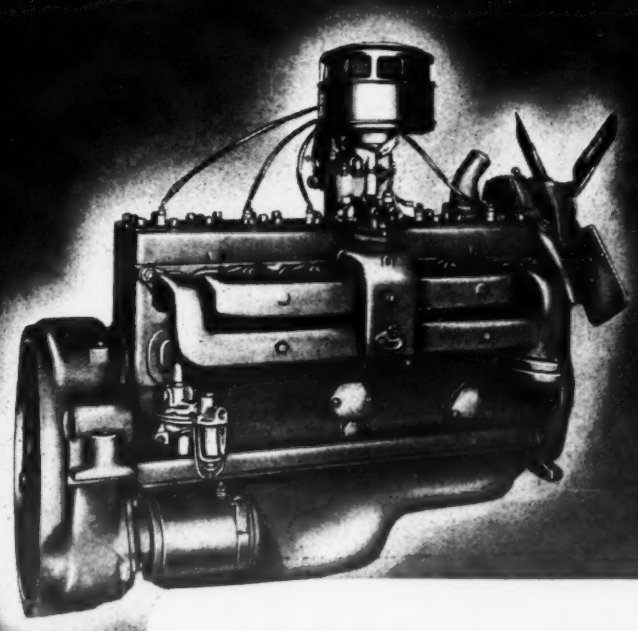
MICHIGAN DIE CASTING CO., 11831 Charlevoix ave., Detroit, Mich. Die castings, license plate frames. Louis W. Blauman, pres.; E. Martin Tallberg, secy.; William N. Schnell, treas.

MICHIGAN STEEL CASTING CO., 1906 Guoin st., Detroit, Mich. Carbon and alloy steel castings, stainless steel, corrosion and heat resisting alloy castings. E. D. Flintermann, pres.; H. B. Hoyt, vice-pres.; N. W. Collord, secy.-treas.; J. D. Corfield, sales. mgr., adv. mgr.; A. B. Thompson, engr.; H. Z. Neblett, pur. agt. **Det. Rep.**—I. Traynor. **Adv. Agcy.**—L. Chas. Lussier, Detroit, Mich.

MICHIGAN TOOL CO., 7171 E. McNichols rd., Detroit, Mich. Ground and underground hobs, gear finishing machines, spur and spiral gear shaper cutters, gear lapping machines, master gears and burnishers, gear inspection equipment, milling cutters, end mills, saws and misc. cutting tools, hob checking equipment, special machinery. Otto Lundell, pres., treas.; O. L. Bard, secy.; D. F. Ahlberg, ofce. and crdt. mgr.; A. Denham, adv. mgr.; J. C. Drader, engr.; P.
(Continued on Next Page)

FACILITIES

Plus EXPERIENCE



SINCE 1902 this organization has been an important factor in the automotive industry. Our research, engineering and production facilities continue to contribute many great advancements in internal combustion engine design.

Continental's most recent development in engine design is Individual Porting. Continental Patented Individual Porting provides single cylinder fuel economy in multi-cylinder engines. Such uniform mixture delivery results in higher volumetric efficiency, more power and greatly improved economy. In addition to Individual Porting Continental engines incorporate many advanced engineering features including: (1) Pressure-lubricated self-locking tappets; (2) Full length water jackets; (3) Water between cylinders; (4) Directional cooling; (5) Counter-balanced crankshaft; (6) Ball-bearing water pump with carbon seal. Continental engines are available as standard power units for automotive, truck, bus, marine, aircraft, industrial, tractor, agricultural machinery and many other applications. Write for specification bulletins describing Continental's new M600 series of 6-cylinder engines.

CONTINENTAL MOTORS — Powerful as the Nation — AMERICA'S STANDARD

Continental Motors Corporation

Factories: Detroit and Muskegon Offices: Detroit, Michigan

Who's Who

(Continued from Previous Page)

Norman, pur. agt. **Adv. Agcy.**—Denham and Co., 1037 Book bldg., Detroit, Mich.

MICROMATIC HONE CORP., 7401 Dubois st., Detroit, Mich. Cylinder honing machine tools. Kirk W. Connor, pres.; H. M. Whittaker, vice-pres.; A. J. Prentice, secy.-treas.; Newell H. Hubbard, sales mgr.; L. S. Martz, adv. mgr.; J. E. Kline, engr.; L. D. Curtis, pur. agt.; A. Bleasdale, fact. mgr. **Adv. Agcy.**—Witte & Burden, 5757 Cass ave., Detroit, Mich.

MIDLAND STEEL PRODUCTS CO., Madison ave and W. 106th st., Cleveland, O. Chassis frames, axle housings, power, mechanical and hydraulic brakes, brake shoes, aprons and conduits, stampings, trailer stoves, tube products, clinch nuts. E. J. Kulas, pres.; Gordon Stoner, vice-pres., gen. mgr.; J. W. Reavis, secy.; R. C. Artner, asst. treas.; L. J. Fralick, sales mgr.; J. R. Almond, engr.; T. M. Leonard, Cleveland pur. agt.; G. T. Purdy, Detroit pur. agt. **Det. Rep.**—L. J. Fralick, 6660 Mt. Elliott. **Adv. Agcy.**—Sweeney & James, Cleveland, O.

MID-WEST ABRASIVE CO., 2189 Beaufiat, Detroit, Mich. Coated abrasives and grinding wheels. James T. Jackson, pres.; N. Bradley Higbie jr., vice-pres.; L. V. Dippell, vice-pres.; L. F. Guetschow, secy.; Wm. E. Essery, treas.; K. B. Champ, sales mgr.; John Kretzschmar, pur. agt.

MILEY, L. J. CO., Inc., 1462 S. Michigan ave., Chicago, Ill. Brake lining, shoes, clutch facings and plates. M. H. Miley, pres.; E. G. Jacobs, gen. mgr.; Marshall Steder, sales mgr.

MILLER ELECTRIC MFG. CO., Inc. 905 N. Meade st., Appleton, Wis. Arc welders, arc saws. Niels C. Miller, pres., gen. mgr.; Elizabeth Miller, vice-pres.; John Mulder, secy.; R. C. Breth, adv. mgr.

MILLER, HENRY STEEL CO., Winston-Salem, N. C. Steel bins, parts and department equipment. Henry A. Miller, pres.; J. J. Hardie, sales mgr.

MILLER MFG. CO., 1220 Kaighn ave., Camden, N. J. Welds, seal, boiler compound. Lillian K. Carrol, pres., sales mgr., adv. mgr.; William I. Miller, vice-pres., secy.; Calvin A. Walters, vice-pres.; Mrs. Elizabeth Miller, treas.

MILLER TOOL & MFG. CO., 1725 16th st., Detroit, Mich. Special service tools, brake adjusting gauges, brake shoe grinders, bearing pullers, clutch plate aligning arbors, connecting rod aligner, engine lifting fixtures, front end alignment equipment, hydraulic bleeder tanks, hydraulic brake cylinder refiller, hypoid rear axle flusher, radiator flush guns, shock absorber service tools, steering wheel pullers, portable tool toters, vacuum gauges, wheel pullers. A. L. Miller, pres., gen. mgr.; F. C. Kraft, vice-pres.; Wm. Griffin, secy.; C. P. Scudamore, treas.; E. J. Wright, sales mgr., adv. mgr.; W. J. Mattison, engr.; W. F. Kenworthy, pur. agt.

MILWAUKEE PUMP & TANK WORKS, Inc., 714 E. Nash st., Milwaukee, Wis. Gasoline service station equipment, parts and service. Chas. D. Ashley, pres.; M. P. Kojis, gen. mgr., secy..

MIN-A-MAX CO., 3024 Minnehaha ave., Minneapolis, Minn. High presure and hand operating greasing equipment. S. J. Krannak, pres.; G. J. Krannak, vice-pres.

MINNESOTA AUTOMOBILE DEALERS ASSN., 317 Plymouth bldg., Minneapolis, Minn. Otto Kummer, pres.; C. D. Gustafson, vice-pres.; D. V. Murphy, vice-pres.; Herman Lundby, vice-pres.; Jack Finch, secy.; R. N. Jones, treas.; H. M. Whisman, gen. mgr.

MINNESOTA MINING & MFG. CO., Forest and Fauquier sts., St. Paul, Minn. Fibre combination discs, cloth, sandpaper, lacquer finishing compound, cleaner and polish, wax, buffing liquid, cement, deadner and sealer, valve grinding compounds, masking tapes. W. L. McKnight, pres., gen. mgr.; A. G. Bush, vice-pres.; R. P. Carlton, vice-pres.; J. E. Cable, secy.-treas.; G. H. Halpin, sales mgr.; F. H. Camp, Adv. mgr.; B. B. Countryman, pur. agt. **Adv. Agcy.**—McCord Co., Inc., 1225 1st National Soo Line bldg., Minneapolis, Minn.

MITCHELL DIV., United Specialties Co., Holmesburg, Pa. Door dovetails, rolled steel sections, ignition dimmer and headlight switches, small stampings, metal mouldings. E. K. Williams, gen. mgr.; C. W. Moore, chief engr.; J. C. Pickel, pur. agt. **Det. Rep.**—R. J. Schaffer, 409 Curtis bldg.

MODINE MFG. CO., Racine Wis. Radiators for internal combustion engine cooling, oil coolers, and industrial heat transfer equipment. A. B. Modine, pres.; W. C. Winkel, vice-pres., treas.; C. T. Perkins, vice-pres., engr.; A. F. Thompson, secy.; W. J. Burke jr., sales mgr.; G. H. Jackson, pur. agt.

MODERN EQUIPMENT CORP., Defiance, O. Electric lifts, air compressors. T. C. Werbe, pres.; M. H. Pendergast, vice-pres., gen. mgr.; W. C. Allen, vice-pres., sales. mgr.; J. L. Watts, secy.; C. M. Wertz, treas. **Det. Rep.**—Wm. F. Beckley, 17302 Pennington dr. **Adv. Agcy.**—Louis E. Wade, Inc., Fort. Wayne, Ind.

MOHAWK RUBBER CO., 1235 Second ave., Akron, O. Tires, tubes, repair materials and accessories. R. E. Bloch, pres., treas.; C. A. Dwyer, sales mgr.; K. A. Moody, secy.; J. R. Brook, adv. mgr.; C. D. Bucher, pur. agt.

MOLINE BODY CO., 222 52nd st, Moline, Ill. Truck bodies. R. L. Shoecraft, owner and gen. mgr.

MOLINE FORGE, Inc., 41st st. and 4th ave., Moline, Ill. Drop and upset forgings. H. W. Getz, pres.; A. E. Sandberg, vice-pres., gen. mgr.; Howard H. Rogers, secy.; M. H. Liljergren, pur. agt.; B. H. Andrews, supt.

MONARCH GOVERNOR CO., 1832 Bethune ave, W., Detroit, Mich. Gasoline engine governors, speed controlling devices. J. W. Anderson sr., pres.; J. W. Anderson jr., vice-pres., gen. mgr., D. Harrison Millard, sales mgr.; R. Uhle, adv. mgr., pur. agt.; L. F. Sarnes, engr.; W. W. Marshall, distrib. sales.

MONARCH INSULATED WIRE CORP., 491 Broadway, New York, N. Y. Automotive replacement parts for starting, lighting and ignition. Ned Morris, pres., sales. mgr.; Harry A. Morris, pur. agt., secy.-treas.

MONARCH TOOL & MACHINERY CO., 4450 Fifth ave., Chicago, Ill. Mirrors, grease and oil guns, sun visors, horn rings, caps, breather caps, crank case breathers, headlight lens removers, windshield wipers, exhaust pipe extensions, spray guns, flashlite vanity mirror. W. F. Clark, pres., pur. agt.; Ben Jelinek, vice-pres.; F. Grish, secy.-treas.; A. H. Merar, sales mgr. **Det. Rep.**—Mark L. Berman, 2722 Webb ave.

MONARCH TOW-BAR CO., 12801 Kercheval ave., Detroit, Mich. Tow-bars. John P. Fleming, pres.; William J. Woller, secy.-treas.

(See display advertising index)

MOMMOUTH PRODUCTS CO., 1929 E. 61st st., Cleveland, O. Hardened and ground parts, machined parts of all types, clutch plates and parts, and humidifying systems. E. L. Davis, pres., Gen. mgr.; G. M. Salzman, vice-pres.; C. G. Wood, sales mgr.; J. G. Baehr, adv. mgr.; S. G. Waite, pur. agt. **Det. Rep.** — T. B. McLaughlin, 17311 Santa Barbara dr.

MONROE ACME CO., 2106 S. Kedzie ave., Chicago, Ill. Dome lamps, warning and marker lamps, rear view mirrors and reflectors for commercial vehicles, interior lighting fixtures for house trailers. B. M. Hearne, pres., gen. mgr.; D. T. Hearne, vice-pres.; H. Wagner, secy.-treas. **Det. Rep.**—H. G. Johnston, 12-216 General Motors bldg.

MONROE AUTO EQUIPMENT CO., E. First st., Monroe, Mich. Shock absorbers, sway bars, connecting links, tire pumps, bumper jacks, lateral struts, stampings, body deadener. B. D. McIntyre, pres., gen. mgr.; W. D. McIntyre, vice-pres., treas.; A. F. Meyer, vice-pres.; C. S. McIntyre jr., secy.; A. Boor, chief engr.; G. J. Henrich, pur. agt.; G. M. Streicher, supt.; H. E. Lentz, aud.

MORAINE PRODUCTS DIV., General Motors Corp., Wisconsin blvd., Dayton, O. Bearings and bushings, friction materials, fluid seals. J. H. Davis, gen. mgr.; E. S. Patch, sales mgr.; E. H. Collins, adv. mgr.; J. A. Lignian, engr.; R. Hamburger, pur. agt.; L. L. Lohman, treas. **Det. Rep.**—A. E. DeClercq, 7720 Agnes ave. **Adv. Agcy.**—Horace Lytle, Dayton, O.

MORELAND MOTOR TRUCK CO., 923 E. San Fernando rd., Burbank, Calif. Trucks, trailers, bodies and parts. Watt L. Moreland, pres., gen. mgr.; Robert M. Allan, vice-pres.; C. W. Creighton, secy.-treas.; Leo L. Freese and Alex Mecca, sales mgrs.; John Wiggers, engr.; J. L. Wells, pur. agt.

MORGAN INDUSTRIAL PRODUCTS CO., 412-416 Morgan ave., Brooklyn, N. Y., Composition cork sheets, gaskets, cork, automobile soap, distilled battery water. Wm. E. Warner, pres.; Vincent Scuderu, gen. mgr.; Leo Booth, engr.

MORSE CHAIN CO., 7601 Central ave., Detroit, Mich. Silent and roller chains, sprockets, flexible couplings. D. B. Perry, pres., secy.; C. J. Kenerson, exec. vice-pres., treas.; F. M. Hawley, vice-pres.; C. J. Kenerson, treas., gen. mgr.; F. M. Hawley, sales and adv. mgr.; A. Moorhouse, engr.; F. H. Blickwede, pur. agt. **Det. Rep.**—Morse Chain Co. **Adv. Agcy.**—Fred M. Randall Co., 3314 Book Tower, Detroit, Mich.

MORTELL, J. W. CO., 550 N. Hobbie ave., Kankakee, Ill. Body deadeners, sealers, adhesives and cements, chasis blacks, industrial paints and varnishes. J. L. Mortell, pres.; Geo. P. Hooper, vice-pres., gen. mgr.; J. T. Healey, vice-pres.; E. E. Mortell, secy-treas.; G. A. Brown, sales mgr.; E. A. Johnson, serv. engr., automotive. **Det. Rep.** — J. W. Mortell Co., 819 Fisher bldg.

MOTOR AND EQUIPMENT MFRS. ASSN., 250 W. 57th st., New York, N. Y. Automotive association. Fred G. Wacker, pres.; H. L. Sharlock, vice-pres.; W. P. Ferris, secy.; C. P. Brewster, treas.; A. H. Eichholz, gen. mgr.; A. H. Fagan, credit mgr.; T. I. Evans, comptr.

MOTOR AND EQUIPMENT WHOLESALERS ASSN., 309 W. Jackson blvd., Chicago, Ill. Trade association. B. W. Ruark, gen. mgr.

MOTOR IMPROVEMENTS, Inc., 365 Frelinghuysen ave., Newark, N. J. Purolator oil filters. John A. Graham, pres., gen. mgr.; Ralph R. Layte, vice-pres.; E. B. Headden, vice-pres.; W. M. Kane, asst. secy., asst. gen. sales mgr.; H. W. Thogode, treas.; J. M. Clarke, sales mgr., (wholesale dist.); F. P. Herman, sales mgr. (fct. equip.); J. A. Graham, adv. mgr.; L. W. Williams,, engr.; John Schafer, pur. agt. **Det. Rep.**—F. P. Herman, mgr., 729 Fisher bldg. **Adv. Agcy.**—Aitkin-Kynett Co., 14400 S. Penn Square, Philadelphia, Pa.

MOTORS METAL MFG. CO., 5936 Milford ave., Detroit, Mich. Stampings, fenders, hoods, radiator shells, radiator guards, running board shields, running boards, engine pans, body stampings, instrument boards. Robert R. McMath, pres.; Steve J. Menzel, vice. pres., gen. mgr.; Nelson C. Johnson, secy.-treas.; Ferris B. Fick, sales mgr., adv. mgr.; Vincent A. Corrado, engr.; B. R. Schofield, pur, agt.; E. J. Sullivan, works mgr.; Geo. S. Burke, asst. sales mgr.; James W. Goble, comptroller.

MOTOR WHEEL CORP., 701-735 E. Saginaw, Lansing, Mich. Wheels, metal stampings. H. F. Harper, pres., gen. mgr.; D. L. Porter, vice-pres., treas.; C. C. Carlton, vice-pres., secy.; C. S. Holden, vice-pres. in chge. of sales; J. Harold Hunt, vice-pres. in chge. of engr.; J. E. Garlent, vice-pres. in chge. of mfg.; M. F. Cotes, vice-pres. in chge. of Duo-Therm Div.; W. C. Brock, vice-pres. in chge of southern plants; C. C. Richardson, pur. agt.; K. G. Egeler, adv. mgr. **Det. Rep.**—Detroit Office, 529 New Center bldg. **Adv. Agcy.**—Young & Rubicam, Detroit, Mich.

MUELLER BRASS CO., 1925 Lapeer ave., Port Huron, Mich. Brass forgings, screw machine products, brass and bronze rod, welding rod, seamless commercial copper tube, solder type fittings for copper tube, close tolerance copper pipe, chrome plating, nickel plating, sand castings. F. L. Riggin sr., pres., gen. mgr.; W. M. Edmondson, secy.-treas.; C. A. Button, L. E. Strasburg, C. E. Berry, F. L. Riggin jr., sales mgrs.; J. R. Wightman, adv. mgr.; Wm. Tielking, engr.; H. F. Lewis pur. agt. **Det. Rep.**—Hunter-Wilkie Co., 2842 W. Grand blvd.

MULLINS MFG. CORP., Salem and Warren, O. Utility trailers. G. E. Whitlock, pres.; H. F. Kulas, vice-pres. in chge. of oper.; C. A. Morrow, vice-pres. in chge. of sales; Andrew MacLeod, secy.-treas.; G. F. Keyes, gen. sales mgr.; O. L. Earl, asst. sales mgr.; J. H. Gonda, chief engr.; J. Farrell, pur. agt.

MUNICIPAL SUPPLY CO., South Bend, Ind. Bituminous distributors, traffic-line markers, etc. D. D. Paulson, pres.; A. H. Thielens, vice-pres., treas.; C. F. Greenburg, secy.

MURRAY CORP. OF AMERICA, 7700 Russell st., Detroit, Mich. Automobile bodies, stampings, fenders, frames, cushion springs, Clarence W. Avery, chmn., pres.; Chas. H. Widman, vice-pres., sales mgr.; C. David Widman, secy.-treas.; H. W. Wurster, asst. secy.-treas.; L. Clayton Hill, gen. mgr.; O. F. Graebner, engr.; J. W. McFarland, pur. agt. **Adv. Agcy.**—N. W. Ayer & Son, Penobscot bldg., Detroit, Mich.

MYERS, F. E. & BRO. CO., Ashland, O. Auto washers, water systems for service stations, etc., door hangers for garages and storages. J. C. Myers, pres.; G. D. Myers, vice-pres.; E. A. McDowell, vice-pres., gen. mgr.; Curtis Ginn jr., vice-pres.; F. B. Kellogg, secy.-treas.; C. D. Leiter, sales mgr.; E. F. Brubaker, adv. mgr.; E. O. Taylor, engr. **Adv. Agcy.**—Mumm-Roomer-Robbins & Pearson Co., Columbus, O.

N

NACTO CLEANER CORP., 2171 Madison ave., New York, N. Y. Fabric cleaner, tar remover, automobile body polish, etc. J. E. Kelly, pres., gen. mgr.; G. S. McHarg, vice-pres., treas.

NAPOLEON PRODUCTS CO., 410 Filmore st., Napoleon, O. Screw machine products to order only. G. M. Small, pres., gen. mgr.; I. B. Nielsen, vice-pres.; E. G. Davies, secy.; H. F. Sauber, engr.

NASH-KELVINATOR CORP., Nash Motors Div., 14250 Plymouth rd., Detroit, Mich. Passenger cars. C. W. Nash, chmn.; G. W. Mason, pres.; C. H. Bliss, vice-pres.; H. J. Mellum, secy.; H. A. Lewis, treas.; Courtney Johnson, sales mgr.; A. R. Boscom, adv. mgr.; N. E. Wahlberg, engr.; H. E. Long, pur. agt. **Det. Rep.**—Nash Detroit Co., 5036 Woodward ave. **Adv. Agcy.**—Geyer, Cornell & Newell, Inc., 745 Fifth ave., New York, N. Y.

NATIONAL ACME CO., 170 E. 131st st. Cleveland, O. Automatic screw and chucking machines, screw machine products, centrifuges. F. H. Chapin, chmn., pres.; W. R. Mitchell, exec. vice-pres., gen. mgr.; C. W. Simpson, vice-pres., works mgr.; T. L. Strimple, secy.; G. J. Steinbicker, treas.; A. E. Henn, sales mgr.; L. E. Honeywell, adv. mgr.; A. E. Drissner, vice-pres., chief engr.; R. J. Gosling, pur. agt. **Det. Rep.**—S. E. Casson, 2826 E. Grand blvd.

(Continued on Next Page)

ENGINEERING AND BUILDING *Quality*

The engineering staff which serves each group of related AC products is experienced in designing new products *and* in adapting existing products. The manufacturing department, seasoned by many years of large volume production to high standards, is equally able at meeting the requirements of AC customers. Together, engineering and manufacturing function equally well on producing entirely new equipment products and on fitting existing products to any and every type of service. You can always look to AC for quality.

AC SPARK PLUG DIVISION
General Motors Corporation
FLINT, MICHIGAN

AC

AC NOW BUILDS THESE *Quality* PRODUCTS

AIR CLEANERS
AMMETERS
CARBURETOR INTAKE SILENCERS
CARBURETOR INTAKE SILENCERS AND AIR CLEANERS
DIE CASTINGS
DIE CASTING MACHINES
FLAME ARRESTERS
FLEXIBLE SHAFTS AND CABLES
FUEL PUMPS
FUEL AND VACUUM PUMPS
GASOLINE GAUGES
GASOLINE STRAINERS
INSTRUMENT PANELS
ENGINE BEARINGS
LOCKER DOORS
OIL FILTERS
PRESSURE GAUGES
RADIATOR PRESSURE CAPS
REFLEX SIGNALS
REMO INJECTORS AND FLUID
SPARK PLUGS
SPARK PLUG CLEANERS
SPARK PLUG TESTERS
SPARK PLUG GAPPING TOOLS
SPEEDOMETERS
TACHOMETERS
THERMO GAUGES
VACUUM PUMPS

Who's Who

(Continued from Previous Page)

NATIONAL ALUMINUM CO., Inc., 1912 Edgewood, ave., Racine, Wis. Pattern plates, solder (aluminum), accelerator pedals. L. E. Wolff, pres.; M. E. Wolff, vice-pres.; A. H. Wolff, gen. sales mgr.

NATIONAL ASSN. OF MOTOR BUS OPERATORS, 831 Tower bldg., Washington, D. C. Trade association. A. M. Hill, pres.; E. W. Wakelee, vice-pres.; E. D. Merrill, treas.; A. W. Koehler, secy., mgr. **Det. Rep.**—W. G. Fitzpatrick, 328 Bates st.

NATIONAL ASSN. OF SALES FINANCE COMPANIES, 360 N. Michigan ave., Chicago, Ill. Trade association. A. D. Weller, pres.; Geo. F. Benkhart, Victor L. Brown, T. E. Courtney, Glenn B. Ryman, vice-pres.; Daniel W. Hinckley, treas.; Milan V. Ayres, secy., analyst.

NATIONAL AUTOMOTIVE FIBRES, Inc., 19925 Hoover ave., Detroit, Mich. Interior trim for automobiles. J. R. Millar, pres.; M. M. Baruh, W. S. Becker, I. Zellerbach, R. F. Livingston, C. E. Carpenter, vice-pres.; J. H. Grut, secy.; H. R. Crawford, treas.; J. C. Bolles, sales mgr.

NATIONAL AUTOMATIC TOOL CO., S. 7th and N sts., Richmond, Ind. Single and multiple spindle drilling, boring and tapping machines, etc. H. W. Beckhoff, chmn., gen. mgr.; D. Frank, vice-pres. in chge. of sales.; J. H. McCrea, secy.; H. E. Mills, adv. mgr.; F. J. Peters, engr.; R. P. Sperling, pur. agt. **Det. Rep.**—Natco Sales Office, 409 New Center bldg.

NATIONAL BATTERY CO., 1728 Roblyn ave., St. Paul, Minn. Storage batteries. A. H. Daggett, pres.; Herbert King, vice-pres. in chge. of sales; H. J. McKay, vice-pres in chge. of prod.; C. R. Bachmann, secy.; E. F. Cary, treas.; F. K. Bauer, sales mgr.; C. L. Clark, adv. mgr.; B. T. Rabuse, pur. agt. **Adv. Agcy.**—Batten, Barton, Durstine & Osborn, Northwestern Bank bldg., Minneapolis, Minn.

NATIONAL BROACH & MACHINE CO., 11455 Shoemaker and St. Jean, Detroit, Mich. Gear finishing, lapping and measuring machines, sound testing and gear burring machines, surface shaving machine, and special machinery. Broaching tools and fixtures, gear shaper cutters, formtools. Broach and lapping compounds. Robert S. Drummond, pres.; R. S. Drummond, pres., gen. mgr.; W. S. Praeg, vice-pres., chief engr.; J. Irvin Schultz, adv. mgr.; Frank Kirsten, pur. agt. **Det. Rep.**—A. Forberg, 19193 Pennington dr., and L. B. Alliason, 18435 Lancashire rd. **Adv. Agcy.**—Witte and Burden, 5757 Cass ave., Detroit, Mich.

NATIONAL BRONZE & ALUMINUM FOUNDRY CO., E. 88th and Laisy ave., Cleveland, O. Aluminum alloy castings. John H. Schmeller, pres., gen. mgr.; Dean D. Francis, vice-pres.; Wm. H. Muth, secy.; Geo. N. Wright, pur. agt. **Det. Rep.**—Harper D. LeBel, 601 Stephenson bldg.

NATIONAL CARBON CO., Inc., 30 E. 42nd st., New York, N. Y. Anti freeze, rust preventatives, dry cell batteries, flashlights, radiator cleaner, replacement lamp bulbs. P. P. Huffard, pres.; J. M. Spangler, gen. sales mgr.; H. M. Warren, adv. mgr. **Adv. Agcy.**—J. M. Mathes, New York, N. Y.

(See display advertising index)

NATIONAL ELECTRIC PRODUCTS CORP., Pittsburgh, Pa. Conduits, tubing, electrical conductors, fittings. W. C. Robinson, pres.; J. A. Bennett, vice-pres., sales mgr.; A. L. Robinson, vice-pres., secy.; W. C. Robinson jr., vice-pres.; H. H. Robinson, treas.; W. T. Clawson, adv. mgr.; O. A. Fredrickson, engr.

NATIONAL ENAMELING AND STAMPING CO., 270 N. Twelfth st., Milwaukee, Wis. Enameled ware, circulating heaters, etc. A. J. Kieckhefer, pres.; J. F. Howard, treas.; G. C. Davis, sales mgr.; H. H. Dooley, adv. mgr.; H. J. Moon, engr.; A. R. Curtis, pur. agt.; T. E. Fajen, sales mgr., electrical div.; E. P. Altemeier, asst. sales mgr. **Adv. Agcy.**—Reincke-Ellis-Younggreen & Finn, 520 N. Michigan ave., Chicago, Ill.

NATIONAL HIGHWAY USERS CONFERENCE, National Press bldg., Washington, D. C. A conference of national associations interested in highways, highway transportation and motor vehicle taxation. Alfred P. Sloan jr., chmn.; Thomas P. Henry, vice-chmn.; L. J. Taber, secy.-treas.; Chester H. Gray, dir.; Edgar Markham, asst. dir.

NATIONAL MACHINE & TOOL CO., 801 S. Water st., Jackson, Mich. Garage tools, replacement axles. J. E. Dowley, pres., gen. mgr.; A. L. Dowley, secy.-treas.; L. D. Cantine, sales and adv. mgr.; W. E. Smith, engr.; J. C. Mick, fcty. supt. **Adv. Agcy.**—Sales Promotion Counsel, 230 N. Washington ave., Lansing, Mich.

NATIONAL MALLEABLE & STEEL CASTINGS CO., 10600 Quincy ave., Cleveland, O. Malleable steel and alloy castings for all purposes. Henry F. Pope, chmn.; Carl C. Gibbs, pres.; Jas. A. Slater, vice-pres.; C. H. Pomeroy, secy.-treas.; Charles H. McCrea, Cleveland works mgr.; J. O. Houze, Chicago works mgr.; H. I. Hiatt, sales mgr.; S. C. Wasson, Indianapolis works mgr.; A. L. McColloum, sales mgr. **Det. Rep.**—Charles H. McCrea, Cleveland, O.

NATIONAL MOTOR BEARING CO., 1100 78th ave., Oakland, Calif. Shims and oil seals. L. A. Johnson, pres., gen mgr.; D. O. Johnson, L. P. Denny, vice-pres.; W. L. Johnson, secy.; H. K. Pohlman, pur. agt. **Det. Rep.**—H. Klein, 477 Selden ave.

NATIONAL PNEUMATIC CO., New Brunswick ave., Rahway, N. J. Pneumatic and vacuum door operating and control systems, pneumatic windshield wipers, fume eliminators. P. R. Forman, pres., gen. mgr.; O. A. Broten, vice-pres., sales mgr.; Frank Johnson, secy.-treas.; A. P. Schendorf, adv. mgr.; J. R. Newkirk, engr.; D. A. Talbot, pur. agt.

NATIONAL PUMPS CORP., 3274 Beekman st., Cincinnati, O. Gasoline filling station pumps and other equipment. G. F. Mattman, pres., treas.; F. W. Moore, vice-pres.; D. B. Hoffman, secy.; C. H. Michael, sales mgr.; J. W. Graham, pur. agt. **Det. Rep.**—O. C. White, 5745 W. Warren ave. **Adv. Agcy.**—Keelor & Stites Co., Carew Tower, Cincinnati, O.

NATIONAL SCREW & MFG. CO., 2440 E. 75th st., Cleveland, O. Bolts, nuts, screws, rivets, spokes and nipples, tacks, cut nails, staples. D. C. Griese, chmn.; H. G. Alexander, pres.; C. F. Newpher, vice-pres., sales mgr.; C. R. Elliott, vice-pres.; E. E. Griese, secy.-treas.; C. W. Baker, adv. mgr.; H. C. Erdman, engr.; H. H. Krause, pur. agt. **Det. Rep.**—F. M. Elliott, 952 Book bldg. **Adv. Agcy.**—Fuller & Ross & Smith, Cleveland, O.

NATIONAL STANDARD PARTS ASSN., 1420 United Artists bldg., Detroit, Mich. Trade association. V. C. Hosselman, pres., L. G. Matthews sr., vice-pres.; V. C. Anderson jr., vice-pres.; E. P. Chalfant, exec. vice-pres.; R. W. Proctor, secy. mfg. div.; C. D. McKim, secy., wholesalers' div.; G. B. Ahn jr., secy.

NATIONAL TIME & SIGNAL CORP., 603 E. Milwaukee ave., Detroit, Mich. Bells, gongs, buzzers, fire alarm equip., clocks, outdoor advertising, luma-dial, etc. R. S. Fulton, pres.; S. M. Haley, secy.; M. D. Williamson, engr.

NATIONAL TRAILER CORP., Huntington, Ind. Trailers. Milo E. Miller, pres., gen. mgr.; Daniel Singer, vice-pres.; engr.; E. G. Mann, sales mgr., secy.

NATIONAL TWIST DRILL & TOOL CO., 6522 Brush st., Detroit, Mich. Twist drills, reamers, milling cutters, hobs, counterbores, special tools. H. L. McGregor, pres., gen. mgr.; E. J. Chamberlain, vice-pres., sales mgr.; A. B. Hulsapple, secy.; A. H. Mueckler, treas.; C. J. Oxford, adv. mgr., engr.; W. G. Base, pur. agt.

NATIONAL USED CAR MARKET REPORT, Inc., 1315 S. Michigan ave., Chicago, Ill. Publishers of National Used Car Market Report service comprised of the Red Book and Blue Book editions. W. E. Butler, pres.; C. E. Gambill, vice-pres., treas.; Thos J. Hay, secy.; G. A. Leukhart, gen. mgr.; J. M. Eadie, chief statistician.

(See display advertising index)

NEW DEPARTURE DIV., General Motors Corp., Bristol, Conn. Ball bearings. F. G. Hughes, gen. mgr.; L. G. Sigourney, sales mgr.; C. B. Beckwith, adv. mgr.; T. C. D. Crow, chief engr.; J. A. Ashwell, pur. agt. **Det. Rep.**—F. W. Marschner, western sales mgr., General Motors bldg. **Adv. Agcy.**—Lord & Thomas, 247 Park ave., New York, N. Y.

NEWHALL CHAIN FORGE & IRON CO., Westwood, N. J. Welded link chains, dredge chains, heavy duty chain slings, conveyor chains, hooks, rings, forgings, etc. H. C. Brown, pres., vice-pres., sales mgr.

NEW HAVEN CLOCK CO., 133 Hamilton st., New Haven, Conn. Automobile electric and spring clocks. R. H. Whitehead, pres., gen. mgr.; E. Stevens, vice-pres., sales mgr.; W. Chamberlain, vice-pres.; Al. Ham, secy.; P. H. English, treas.; F. L. Bradley, asst. secy.; R. H. Chirg-Win, adv. mgr.; Louis DeNegre engr.; F. Newmann, pur. agt. **Det. Rep.**—Getsinger-Fox Co., 302 Stephenson bldg.

(See display advertising index)

NEW JERSEY ZINC CO., 160 Front st., New York, N. Y. Slab and rolled zinc, zinc alloys and pigments. J. E. Hayes, pres.; R. G. Hudson, secy.; N. W. Adsit, treas.; M. L. Havey, sales mgr.; R. Davison, adv. mgr.; W. J. Lee, pur. agt.

NEW YORK LUBRICATING OIL CO., 116 Broad st., New York, N. Y. Motor oils, lubricants and greases. W. W. Dashiell, chmn.; Jas. M. Iverson, pres., treas.; Otto C. W. Weber, vice-pres., secy.; J. J. London, vice-pres., sales mgr.; E. J. Steins, pur. agt. **Adv. Agcy.**—H. B. Lewis, 60 E. 42nd st., New York, N. Y.

NICHOLSON TERMINAL AND DOCK CO., Foot of Great Lakes ave., Ecorse, Mich. Rail and water terminal. Wm. Nicholson, chmn.; Wm. F. Deane, pres.; Chas. R. Dunn, vice-pres.; Walter S. Brown, secy.-treas.

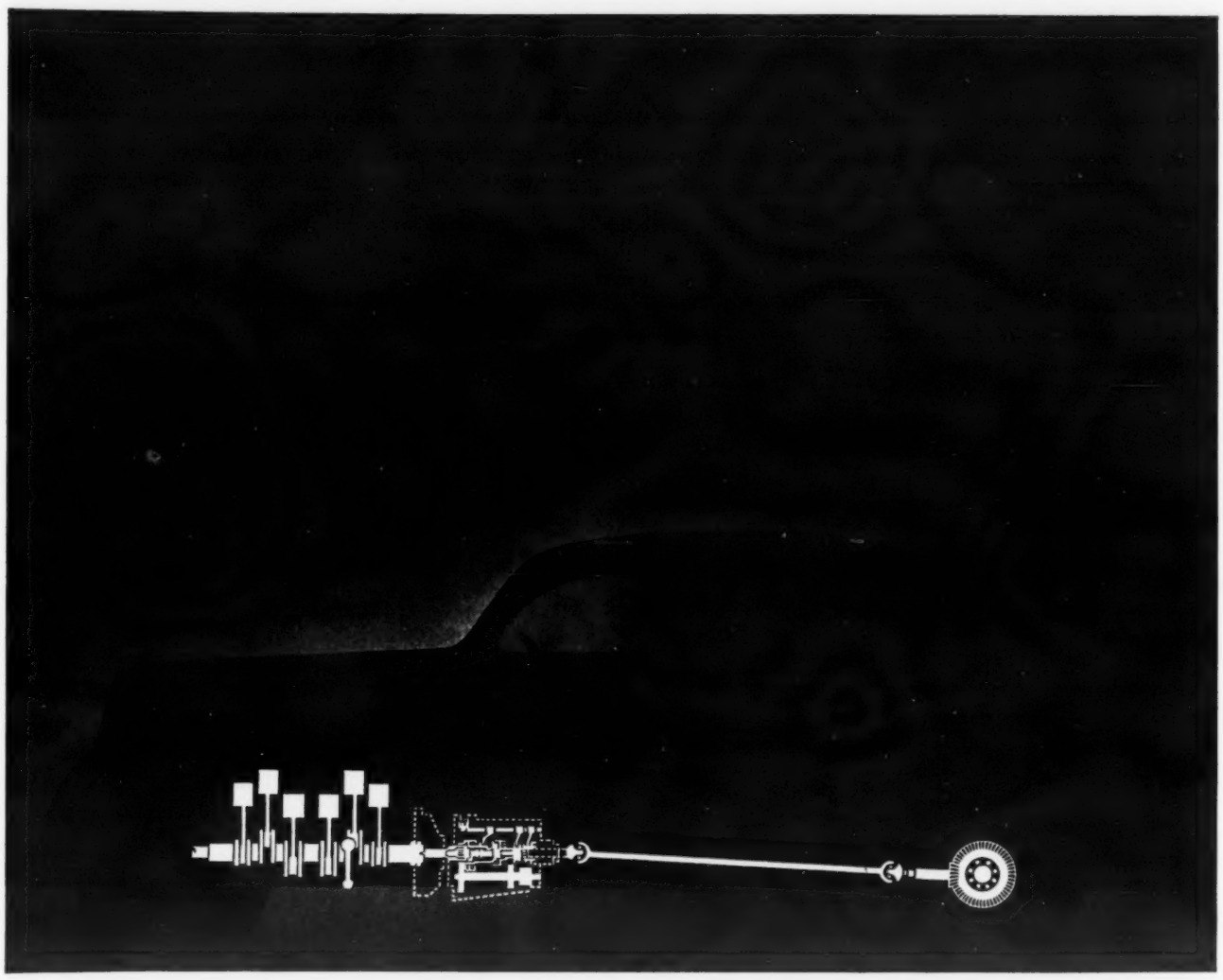
NEW PRODUCTS CORP., 1322 S. Wabash ave., Chicago, Ill. Mechanical automatic clutch-transmission, licensee for motor coaches and passenger cars. Oscar H. Banker, vice-pres. in chge. of engr.

NICE BALL BEARING CO., 30th and Nicetown Lane, Philadelphia, Pa. Ball bearings. Geo. Pierie jr., chmn.; Budd G. Nice, pres.; B. F. Mechling, vice-pres.; S. C. Melhorn, treas.; Geo. Carleton jr., sales mgr.; J. L. McMichael sr., pur. agt. **Det. Rep.**—Wm. S. Turner, 742 New Center bldg.

NIEHOFF, C. E. & CO., 230 W. Superior st., Chicago, Ill. Automotive electrical replacement parts and testing equipment. C. E. Niehoff, pres.; M. A. Niehoff, secy.-treas.; Frank W. Beier, credit mgr.; Carl Sanders, adv. mgr.; E. R. Grant, engr.; L. M. Schmidt, pur. agt.; Frank Schada, export mgr. **Adv. Mgr.**—Chas. Elwyn Hayes, 122 S. Michigan ave., Chicago, Ill.

NON-CORROSIVE WASHER CO., 620

(Continued on Next Page)



The "backbone" of the modern automobile

To THE automotive industry's everlasting credit it can be said that it has never relaxed in striving to make motor cars still safer, still more efficient, and of still greater dollar-for-dollar value. "Make it tougher, stronger, longer lasting," is the relentless self-imposed command. And, though the limits often seem to have been reached, engineering and metallurgical science usually manages to raise the standard another notch.

Molybdenum and Climax's years of field and laboratory investigations have contributed notably to this progress. Through improved steel-alloy analyses, the "backbone" of the modern automobile has attained a reach toward perfection undreamed of a decade ago.

"Moly" steels are going into crankshafts, connecting rods, steering arms and knuckles, transmission gears, propeller shafts, universals, ring-gears and pinions, rear axle shafts. . . . Not only making them better parts, but cutting production costs through improved heat-treating, forging, carburizing and machining.

Engineering and production heads are invited to send for our technical book, "Molybdenum." Our accumulation of data and the facilities of our laboratory are available to any concern interested in "Moly" toward solving difficult ferrous problems. Climax Molybdenum Company, 500 Fifth Avenue, New York City.

PRODUCERS OF FERRO-MOLYBDENUM, CALCIUM MOLYBDATE AND MOLYBDENUM TRIOXIDE

MOLY

Climax Mo-lyb-den-um Company

Who's Who

(Continued from Previous Page)

Merrill ave., Rockford, Ill. Non-Corrosive washers, chemically treated felt washers. M. H. Gorham, pres., gen. mgr. Adv. Agcy.—Lee R. McCullough, 360 N. Michigan ave., Chicago, Ill.

NORGE DIV., Borg-Warner Corp., 670 E. Woodbridge st., Detroit, Mich. Commercial refrigerators, autobuilt washers, heating and air conditioning products. Howard E. Blood, pres.; John H. Knapp, C. D. Donaven, H. H. Whittingham, vice-pres.; John Park, secy.-treas.; P. B. Zimmerman, vice-pres., sales mgr.; J. A. Sterling, adv. mgr.; I. H. Reindel, engr.; W. H. McKiggan, pur. agt. Det. Rep.—Radio Distributing Co., 100 Selden ave. Adv. Agcy.—Cramer-Krasselt Co., Milwaukee, Wis.

NORMA-HOFFMANN BEARINGS CORP., Stamford, Conn. Precision ball, roller and thrust bearings. W. M. Nones, pres.; O. P. Wilson, vice-pres., treas; H. J. Ritter, secy., sales mgr.; D. E. Batesole, chief engr.; T. E. Rounds, asst. chief engr.; C. A. Wattson, pur. agt. Det. Rep.—M. B. Hawxhurst, 3308 Eaton Tower. Adv. Agcy.—L. I. Wightman, 309 State st., New London, Conn.

(See display advertising index)

NORTHERN ENGINEERING WORKS, 2615 Atwater st., Detroit, Mich. Electric cranes, handpower cranes, electric hoists, air hoists. W. W. Peattie, pres.; R. C. Zens, secy.-treas.; C. L. Davis, engr.; A. C. Nugent, pur. agt.

NORTHEASTERN ENGINEERING CO., 3125 E. Larned st., Detroit, Mich. Dies, tools, special machinery, designing. Wm. Krueger, pres.; Hugh M. Hodge, vice-pres., treas.; Juanita Knight, secy.; I. W. Morlan, engr.

NORTON CO., New Bond st., Worcester, Mass. Grinding wheels and machines, refractories and abrasive grain. Charles I. Allen, chmn.; Aldus C. Higgins, pres., gen. mgr.; H. K. Clark, vice-pres., sales mgr.; Howard W. Dunbar, W. L. C. Neilson, vice-pres.; C. S. Anderson, secy.; A. B. Fritts, adv. mgr.; Marcus W. White, pur. agt. Det. Rep.—Philip Clapp, 5806 Lincoln ave. Adv. Agcy.—John W. Odlin Co., Inc., 44 Portland st., Worcester, Mass.

NORWALK TIRE & RUBBER CO., Norwalk, Conn. Tire, tubes, batteries, fan belts, radiator hose, running board step plates, repair materials, cements. J. W. Whitehead, chmn., gen. mgr.; L. P. Arnold, vice-pres.; Harry C. Miller, secy.; A. A. Hall, sales mgr. of access. and batteries; H. G. Schmidt, engr.; W. K. Valentine, pur. agt., treas. Adv. Agcy.—Milton Samuels, 227 Haven st., New York, N. Y.

NOVI PRODUCTS CO., 970 W. Grand River ave., Novi, Mich. All steel bodies. Wesley C. Henning, pres.; Grace A. Henning, secy.-treas. Det. Rep.—Aerocar Co., 4815 Cabot ave.

NOVO ENGINE CO., Lansing, Mich. Engines, pumps, hoists, light plants, compressors. R. H. Scott, pres.; E. P. Teel, vice-pres., gen. mgr.; L. E. Haybarker, secy.-treas.; R. B. Harvey, sales mgr.; A. A. Ballantyne, adv. mgr.; G. W. Stevens, engr.; C. J. Olin, pur. agt.

O

O'BRIEN VARNISH CO., 101 N. Johnson st. South Bend, Ind. Enamels and varnishes, lacquers, synthetic enamels, surfacers, metal primers, graining colors, baked enamels, rubber lacquers. G. L. O'Brien, chmn., pres.; F. M. Reece, vice-pres.; O. A. Fulkerson, secy.; C. J. Morris, sales mgr.; J. J. Crowley, adv. mgr.; J. M. McCarthy, pur. agt.

OHIO PATTERN WORKS & FOUNDRY CO., 2735 Colerain ave., Cincinnati, O. Valves and fittings for service stations and bulk plants, battery cables and terminals, ignition sets and wire, battery service station equipment. J. E. Hausfeld, pres.; E. B. Hausfeld, vice-pres., secy.; E. L. Fehring, treas.; H. A. Nash, gen. mgr.; H. F. Heinzerling, sales mgr., gasoline div.; A. P. Sena, sales mgr., automotive div.; Frank A. Kerhoff, engr.; W. N. Stegman, pur. agt.

OHIO PISTON CO., 5337 St. Clair ave., Cleveland, O. Pistons, pins, cylinder repair sleeves. C. Birnbaum, pres.; E. J. Gutman, vice-pres.; R. G. Horsburgh, secy.-treas.; D. P. Shaw, gen. and sales mgr.; George Svetcoff, engr. Det. Rep.—A. Bernstein, 443 E. Fort st.

OHIO RUBBER CO., Ben Hur ave., Willoughby, O. Running boards, mats and matting, etc. Franklin G. Smith, pres., treas., automotive sales mgr.; H. J. Bechtold, asst. secy.; W. Miller Cook, mechanical sales mgr.; H. W. Schultz, chief engr.; J. R. Keach, pur. agt. Det. Rep.—C. J. Edwards, 2210 Fisher bldg.

OHIO SEAMLESS TUBE CO., 132-140 W. Main st., Shelby, O. Seamless mechanical steel tubing, electric welded steel tubing. Edwin C. Mansfield, chmn.; W. C. Connelly, pres., gen. mgr.; W. W. Van Horn, vice-pres.; E. W. McNeill, secy.-treas.; A. Waines jr., sales mgr.; R. E. Dewey, engr.; D. C. Reagan, pur. agt. Det. Rep.—Ohio Seamless Tube Co., 2857 E. Grand blvd. Adv. Agcy.—Coleman Todd & Associates, Mansfield, O.

OHIO UNITS, 513-535 Hunter ave., Dayton, O. Machine tools, cam contour grinding equipment, automotive parts. A. R. Lambert, prop.; H. L. Brump, chief engr. and asst. mgr.; A. A. Bundy, secy., asst. mgr. Det. Rep.—Haberkorn & Wood, 2832 E. Grand blvd.

OHMER REGISTER CO., Dayton, O. Recording devices, taximeters, ticket-printing registers, etc. John F. Ohmer, chmn., pres.; H. B. Ohmer, vice-pres., gen. mgr.; J. F. Ohmer jr., vice-pres.; R. L. Hubler, vice-pres., sales mgr.; I. F. Lutz, secy.; R. K. Ulrich, adv. mgr.; Ashley Brown, engr.; E. Schmidt, pur. agt. Det. Reps. — R. L. Mainville, 1551 Gratiot ave., G. S. Schweibold, 9614 Otsego ave. Adv. Agcy.—Hugo Wagenseil & Associates, Dayton, O.

OKONITE CO., Newtype Automotive div., Passaic, N. J. Wire, cable, tape. E. A. Scheu, sales mgr. Det. Rep.—E. W. Griffith, 740 Hazelwood ave. Adv. Agcy.—Doyle, Kitchen & McCormick, 501 Fifth ave., New York, N. Y.

OLD GOLD PISTON RING CO., Toledo, O. Sectional piston rings, oil rings, multi-compression rings, skirt expanders. Albert P. Fall, pres., gen. mgr.; Emory A. Fall, sales mgr.; R. M. Hillard, adv. mgr. Adv. Agcy. — Bradford Co., 1220 Madison ave., Toledo, O.

OLDSMOBILE DIV., General Motors Sales Corp., Lansing, Mich. Motor cars. C. L. McCuen, gen. mgr.; D. E. Ralston, sales mgr.; V. C. Havens, adv. mgr.; H. T. Youngren, engr.; A. E. Goossen, pur. agt.; G. R. Browder, R. L. Myers, H. A. Trevellyan, asst. gen. sales mgrs.; M. P. Vorberg, mgr. retail selling; L. T. Weston, asst. adv. mgr. Det. Rep.—J. H. Lemons, General Motors bldg. Adv. Agcy.—D. P. Brother & Co., 8-149 General Motors bldg., Detroit, Mich.

O. & S. BEARING CO., 303 S. Livernois ave., Detroit, Mich. Bearings and bushing, tie rod ball joints, shock absorber links, etc. Newton Skillman, pres.; Robt. Thuner, vice-pres., sales mgr.; Frank H. Delahunty, gen. mgr., pur. agt., secy.-treas.; Bruno Schroeter, engr. Det. Rep.—Robt. Thuner, 303 S. Livernois ave.

OSBORN MFG. CO., 5401 Hamilton ave., Cleveland, O. Industrial and maintenance brushes, paint and varnish brushes, automotive brushes, power-driven wheel brushes, foundry moulding machines and core blowing machines. Franklin G. Smith, pres.; C. W. Titgemeyer, vice-pres., sales mgr.; R. W. Hisey, vice-pres.; N. F. Smith, treas.; Philip F. Smith, gen. mgr.; M. W. Zeman, sales mgr.; C. H. Larsen, asst. adv. mgr.; F. Gilliland, engr., moulding machine div.; E. W. Doller, pur. agt.; F. Dunmire, supt. brush div.; G. Sawitske, supt. machine div. Det. Rep. — E. W. Striebinger, 3-268 General Motors bldg. Adv. Agcy.—G. M. Basford Co., 423 Leader bldg., Cleveland, O.

OSHKOSH MOTOR TRUCK, Inc., P. O. Box 1006, Oshkosh, Wis. Four-wheel drive trucks and tractors. O. J. Hardy, pres.; B. A. Mosling, vice-pres., sales and adv. mgr.; Dr. S. F. Loss, secy.; B. W. Relien, asst. secy.; W. G. Maxcy, gen. mgr., treas.; C. E. Sartwell, engr.; H. J. Allender, pur. agt.; P. A. Villwock, supt. Adv. Agcy.—Dean W. Geer Co., Oshkosh, Wis.

OTWELL HEATER SALES CO., 1279 E. Milwaukee, Detroit, Mich. Manifold and hot water heaters. T. M. A. Otwell, pres.

OUTDOOR ADVERTISING, Inc., 60 E. 42nd st., New York, N. Y. Outdoor advertising representative. K. H. Fulton, pres., gen. mgr.; C. B. McCrelis jr., vice-pres., sales mgr.; C. O. Bridwell, vice-pres., adv. mgr.; R. D. French, Z. C. Barnes, J. A. Brogdon, J. P. Dowdle, G. S. Earnshaw, A. E. Gans, W. H. Grant, J. P. Gillroy, Earl Gulick, S. C. Hartshorn, H. B. Joseph, Malcolm Niebuhr, H. A. Rockwell, Arthur Siegel, Chas. F. Stark, vice-pres.; C. H. Uffelman, pur. agt. Det. Rep.—H. D. Clemons, 7-241 General Motors bldg.

OWEN DYNETO CORP., 1920 Park st., Syracuse, N. Y. Electric windshield wipers, automotive starter motors and generators, welding generators, arc welders, welding wire and accessories. C. O. Miniger, pres.; G. J. Bundy, vice-pres., gen. mgr.; F. H. Landwehr, secy.; W. V. Flood, treas.; J. L. Fosnight, sales mgr. of welder div.; W. E. Brock, prod. engr.; G. L. McCaffrey, pur. agt.

OWEN SILENT SPRING CO., Inc., Bridgeport, Conn. Inner springs for motor car seats. W. B. Lashar, chmn.; W. T. Morris, pres.; W. F. Wheeler, A. P. Van Schaick, C. G. Williams, G. C. Moon, vice-pres.; W. M. Wheeler, secy.; J. W. Bowersox, sales mgr.; J. O. Lashar, adv. mgr. Adv. Agcy. — Reincke-Ellis-Younggreen & Finn, 520 N. Michigan ave., Chicago, Ill.

OXFORD BODY CO., Oxford, N. C. School bus bodies, commercial bodies. C. W. Bryan, pres.; H. B. Bryan, vice-pres.; Chas. O. Mainor, gen. mgr.; H. E. Harris, pur. agt.

P

PACIFIC CAR AND FOUNDRY CO., Motor Coach Div., Renton, Wash. School bus bodies, motor coaches and bodies. Paul Pigott, pres.; H. N. Curd, vice-pres., gen. mgr.; J. E. LeBlanc, treas.; Ferdinand Schmitz, asst. gen. mgr.; A. H. Campbell, sales mgr.; Ev. Mansfield, engr.; H. E. Ridalls, pur. agt. Adv. Agcy.—Sharp & Bedbury, 2107 11th W., Seattle, Wash.

PACIFIC MILLS, 214 Church st., New York, N. Y. Automobile and industrial fabrics of all types. Alfred E. Colby, pres.; H. G. Simonds, H. G. Nichols, vice-pres.; F. S. Whiteside, pur. agt.; F. S. Blanchard, div. mgr. for adv., sales prom., research. Det. Rep.—Lester E. Colby, 741 New Center bldg. Adv. Agcy.—Williams & Saylor, Inc., 485 Madison ave., New York, N. Y.

PACKARD ELECTRIC DIV., General Motors Corp., Warren, O. Automotive cable products. B. N. MacGregor, gen. mgr.; H. C. Mohr., adv. mgr.; L. C. Wolcott, engr.; E. E. DeBolt, pur. agt.; G. S. Carr, sales mgr., equip. div.; R. J. Montgomery, sales mgr., replace. div. Det. Rep.—W. S. Haggott, 7720 Woodward ave. Adv. Agcy.—Campbell-Ewald Co., General Motors bldg., Detroit, Mich.

PACKARD MOTOR CAR CO., 1580 E. Grand blvd., Detroit, Mich. Motor cars. Alvan Macauley, pres.; M. M. Gilman, vice-pres., gen mgr.; J. G. Vincent, vice-pres. of engr.; Henry E. Bodman, vice-pres. and gen. counsel; G. T. Christopher, vice-pres. of mfg.; Hugh J. Ferry, secy.-treas.; Lee J. Eastman, vice- pres.; Milton Tibbetts, vice-pres. and patent counsel; Eugene C. Hoelzle, compt.; A. C. Bennett, asst. secy.-treas.; W. M. Packer, sales mgr.; H. W. Hitchcock, asst. adv. mgr.; C. R. Patton, chief engr.; J. H. Marks, pur. agt. Adv. Agcy.—Young and Rubicam, Detroit, Mich.

PAGE STEEL AND WIRE DIV., American Chain & Cable Co., Inc., Monessen, Pa. Welding wire. W. B. Lashar, chmn.; W. T. Morris, pres.; W. F. Wheeler, A. P. Van Schaick, C. G. Williams, G. C. Moon, vice-pres.; W. M. Wheeler, secy.; W. H. Bleecker, sales mgr.; J. O. Lashar, adv. mgr. Adv. Agcy. — Reincke-Ellis-Younggreen & Finn, 520 N. Michigan ave., Chicago, Ill.

PALACE TRAVEL COACH CORP., Hemphill rd., Flint, Mich. House trailer coaches. D. D. Arehart, chmn., gen. mgr., treas.; H. M. Rogers, vice-pres.; E. P. Trobert, secy.; B. R. Scheff, sales and adv. mgr.; George W. Smith, engr.; T. E. Tuttrup, pur. agt. Det. Rep.—Einer Thorner, 11711 Woodward ave. Adv. Agcy.—Rolfe C. Spinning, Inc., 5057 Woodward ave., Detroit, Mich.

PALMER-BEE CO., Westminster and G.T. R.R., Detroit, Mich. Power transmission and materials handling machinery, structural steel. Wm. E. Bee, chmn.; Geo. A. Bee, pres., gen. mgr.; J. E. McBride, vice-pres.; Donald Sweeney, secy.; A. J. Leckle, treas.; E. S. Davidson, sales mgr.; L. E. Gannon, adv. mgr.; A. Sells, pur. agt.

PARISH PRESSED STEEL CO., Robeson and Weiser sts., Reading, Pa. Automobile frames and steel stampings. C. A. Dana, pres.; H. S. Lewis, vice-pres., gen. mgr.; J. A. Archer, secy.-treas.; D. H. Geiger, sales mgr.; M. L. Fox, engr.; J. B. Marquette, pur. agt.

PARK CHEMICAL CO., 8074 Military ave., Detroit, Mich. Automobile polishes, waxes, liquid cleaners, upholstery cleaners, window cleaners, top dressing, etc. Wm. P. Woodside, pres.; J. N. Bourg, vice-pres., gen. mgr.; T. L. Hutchison-Specialty Div.; H. E. Anderson, industrial div.; H. D. Kitchen, pur. agt., secy.

PARK DROP FORGE CO., 730 E. 79th st., Cleveland, O. Crankshafts, connecting rods and other heavy drop forged parts. Windsor T. White, chmn.; George C. Gordon, pres.; Wm. C. Dunn, vice-pres.; Fred L. Ball, secy.-treas.; A. F. Hodges, asst. treas.; T. A. Knouff, pur. agt.

PARKER APPLIANCE CO., 17325 Euclid ave., Cleveland, O. Tube couplings, valves, cocks, bending tools, fabricating equipment. A. L. Parker, prop.; A. L. Bigelow, gen. mgr.; C. E. Klamm, engr.; R. G. Smith, pur. agt.; H. E. Birtch, supt.; F. E. Amon, sales engr. Det. Rep.—J. N. Fauver, 91 Selden st.

PARKER RUST-PROOF CO., 2177 E. Milwaukee ave., Detroit, Mich. Rust-proofing chemicals. W. M. Cornelius, pres.; M. C. Baker, vice-pres., sales mgr.; G. E. Luke, vice-pres., adv. mgr.; R. C. Bristol, vice-pres.; R. W. Englelhart, secy.; W. M. Cornelius, treas.; R. H. Gordon, engr. Adv. Agcy.—Fred M. Randall Co., Book Tower, Detroit, Mich.

PARKER WOLVERINE CO., 5203 Martin ave., Detroit, Mich. Metal finishing on jobbing basis, metal stampings. C. H. Awkerman, pres., gen. mgr.; W. M. Hawkins, vice-pres.; W. M. Cornelius, treas.; S. C. Hale and M. M. Wise, sales mgr.; L. Z. Dibble, pur. agt. Adv. Agcy.—Fred M. Randall, Book Tower.

PALL MALL MFG. CO., 507 5th ave., New York, N. Y. Polish, haze remover, cleaner and polish, metal polish. Arthur M. Levy, pres.; David Laurence, gen. mgr.

P. & D. MFG. CO., Inc., 1902 Steinway st., Long Island City, N. Y. Starting, lighting, ignition repair parts, wire, cable and friction tape, battery cable units. Peter Piffath, pres.; Berthold Danziger, treas.; Charles S. Rogers, sales mgr.; Walter M. Scott, adv. mgr.; John Piffath, engr. Det. Rep. — O. J. Bate, Sterling hotel, Cleveland, O. Adv. Agcy.—Doyle, Kitchen, McCormick, 501 5th ave., New York, N. Y.

PEASE, C. F. CO., 2601 W. Irving Park rd., Chicago, Ill. Blue printing machines, washers and dryers, photographic arc lamps, etc. Thomas Lord, pres., treas.; W. E. Pashley, vice-pres., sales mgr.; C. D. McCormick, adv. mgr.; H. J. Brunk, engr.; P. E. Shaw, pur. agt.; A. F. Jacobs, asst. sales mgr. Det. Rep.—T. J. Kizer, Grand River and Maple rd.

PEERLESS MOLDED PLASTICS, Inc., Hamilton and Division sts., Toledo, O. Plastic moldings. W. G. Skutch, pres.; P. DeHan, vice-pres., secy.; Det. Rep.—A. L. Moses Co., 637 New Center bldg.

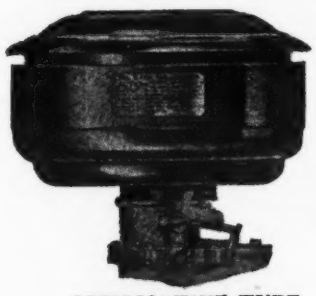
PEERLESS NOVELTY CO., Fulton st., Grand Haven, Mich. Visors and glare shields. electric soldering irons. W. H. Stansberry, pres.; Frederick Keller, sales mgr.; J. D. Newell, engr.

PENNSYLVANIA AUTOMOTIVE ASSN., Payne-Shoemaker bldg., 3rd and Pine sts., Harrisburg, Pa. Trade association. R. C. Jones, pres.; E. L. Turner, vice-pres.; Guy Woodward, vice-pres.; R. A. Erwin, vice-pres.; R. C. Keller, secy.-treas.; C. S. Klugh, gen. mgr.; G. A. Hoeveler and G. G. McFarland, vice-pres.

PENNSYLVANIA GRADE CRUDE OIL ASSN., Oil City National Bank bldg., Oil City, Pa. Trade association. W. F. Clinger, pres.; Fayette B. Dow, vice-pres.;. Parker L. Melvin, vice-pres. John A. Beck, secy.; S. Messer, treas.; J. E. Moorhead, exec. secy.; S. A. Hart-

(Continued on Next Page)

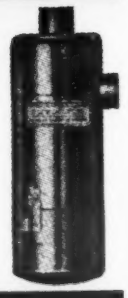
UNITED AIR CLEANER DIVISION
Chicago, Illinois



AUTOMOTIVE TYPE

UNITED
Oil Bath Air
Cleaners

AGRICULTURAL TYPE
Air Stream Completely Sealed Off With Oil
HIGHEST CLEANING EFFICIENCY



This type of Oil Bath air cleaner designed for use on passenger and light commercial trucks equipped with Downdraft carburetors and which operate over highways and streets where dust conditions are too severe for an ordinary screen.
Heavy gauge steel construction throughout —no solder—has removable filter element. Electric welded fabrication Gasoline mileage unaffected by even a pound of trapped dirt in oil reservoir Quickly and easily installed with a common screw driver

HEAVY-DUTY, TRUCK, AUTOMOTIVE AND INDUSTRIAL TYPES OIL BATH AIR CLEANERS
With Big Dirt Trapping Capacity

Manufacturers of

Door Dovetails--Rolled Steel Sections--Stampings--Ignition, Dimmer and Headlight Switches.

MITCHELL DIVISION
Holmesburg
Philadelphia, Pa.

UNITED SPECIALTIES CO.
409 CURTIS BLDG. DETROIT, MICHIGAN

TIME TESTED
McQUAY-NORRIS
PISTON RINGS
PISTONS
PINS
1910 1938
VALVES
BEARINGS
PUMP PARTS
BOLTS-BUSHINGS
PROVEN IN SERVICE

Who's Who

(Continued from Previous Page)

well jr., asst. secy.;; S. F. Pratt, Europ. mgr. **Adv. Agcy.**—O'Dea, Sheldon & Canaday, Inc., 400 Madison ave., New York, N. Y.

PENNSYLVANIA RUBBER CO., Chambers ave., Jeannette Pa. Tires and tubes. A. C. Atkins, chmn.; A. C. Bowers, pres.; C. G. Morrill, secy.-treas.; L. J. Waldron, sales mgr.; C. M. DuPuy, adv. mgr.; I. J. Stinson, pur. agt. **Adv. Agcy.**—Walker & Downing, Oliver bldg., Pittsburg, Pa.

PENNZOIL CO., Drake Theater bldg., Oil City, Pa. Motor oil, gasoline, lubricants, etc. C. L. Suhr, chmn.; W. S. Zehrung, pres., gen. mgr.; M. A. Brewster, vice-pres., treas.; D. W. Grant, vice-pres.; R. A. Browne, secy.; J. F. Vandeventer, asst. secy.; W. J. Dempsey, asst. treas.; Victor Benson, sales mgr.; E. F. Johnson, adv. mgr.; A. W. Clinger, pur. agt. **Det. Rep.**—H. W. Baker, 2523 Barlum Tower. **Adv. Agcy.**—Fuller & Smith & Ross, 1501 Euclid ave., Cleveland, O.

PEORIA AUTOMOTIVE DEALERS ASSN., 212 Lehmann bldg., Peoria, Ill. Trade association. W. M. Waugh, pres.; C. W. Coons, exec. secy.

PEP MFG. CO., 33 W. 42nd st., New York, N. Y. Grinding compounds, frisk degreaser, etc. Ralph Root, pres., gen. mgr.; E. H. Root, vice-pres.; J. R. Feindel, secy.-treas., pur. agt.

PERFECT CIRCLE CO., Hagerstown, Ind. Piston rings, expanders, ridge cutters. Lothair Teetor, pres., gen. mgr.; Ralph Teetor, vice-pres.; Leslie Davis, secy.; Ray Teetor, treas.; Don H. Teetor, sales mgr.; George W. Stout, adv. mgr.; Macy Teetor, engr.; Blair Hartley, pur. agt. **Det. Rep.**—W. B. Prosser, 5-213 General Motors bldg. **Adv. Agsy.**—Henri, Hurst & McDonald, 520 N. Michigan ave., Chicago, Ill.

PERFECTION GEAR CO., 152nd st. and Vincennes ave., Harvey, Ill. Timing gears, timing chains, ring gears and pinions, transmission gears, differential parts, cylinder heads and plates, flywheel gears, clutch rebuilder, valve springs, cover assembly parts. D. H. Daskal, pres., gen. mgr.; S. R. Wolff, vice-pres., sales mgr.; G. H. Daskal, secy.; David Davis, treas., pur. agt.; M. A. Davis, adv. mgr. **Adv. Agcy.**—Arthur R. Mogge, Inc., 307 N. Michigan ave., Chicago, Ill.

PERFECTION MFG. CO., 2701 N.Laffingwell ave., St. Louis, Mo. Auto baby seats and beds. John Haggenjos, pres.; Helen Rumpe, vice-pres., treas.; Emily Eberle, secy.; Oliver Bobe, sales mgr.; Helen Ewerhardt, adv. mgr. **Det. Rep.**—Hugo Grigsby, 30740 Twelve Mile rd., Farmington, Mich.

PERFECTION STEEL BODY CO., Galion, O. Hydraulic hand and gravity hoists and dump bodies. H. Cohen, pres.; M. Cohen, vice-pres.; R. Cohen, secy.-treas.; V. L. Farnsworth, sales mgr.; Karl Feilcke, engr.; M. Kruger, pur. agt. **Adv. Agcy.**—Morgan Advertising Co., Mansfield, O.

PERFEX CORP., 415 W. Oklahoma Place, Milwaukee, Wis. Radiators for trucks, tractors, unit coolers, and heaters. Julius K. Luthe, pres.; F. D. Hansen, exec. vice-pres.; G. G. Holt, vice-pres.; V. R. Tate, secy.

PERRINE QUALITY PRODUCTS, CORP., 55 Rumford ave., Waltham, Mass. Storage batteries. Lester Perrine, pres., gen. mgr.; H. D. Stanley, vice-pres., engr.; M. A. Goldsmith, secy., pur. agt.

PERSONS-MAJESTIC MFG. CO., 54-72 Commercial st., Worcester, Mass. Exhaust guards, reflectors, fog lamps, tow ropes, electric sirens. Charles A. Persons, pres.; Alexander M. Persons, vice.-pres, sales mgr., adv. mgr.; John A. Amberg, vice-pres., treas.; Kenneth A. Brooks, secy.; Harold R. Frazel, pur. agt. **Det Rep.**—C. J. Brophy, 1539 Garland ave.

PETERS AND RUSSELL, Inc., Shuey bldg., Springfield, O. Brunk racks, grille guards, horn rings, exhaust deflectors, spotter mirrors. L. E. Russell, pres., gen. mgr., pur. agt.; G. E. Peters, vice-pres., eng.; S. L. Tatum, secy.; A. A. Russell, treas.

PETROLEUM SOLVENTS CORP., 41-32 27th st., Long Island City, N. Y. Petroleum solvents, crankcase cleaner, hypoid flush. Louis A. Staff, pres., gen. mgr.; S. V. Hirschman, treas., adv. mgr.; W. O. Hebler, engr.; **Adv. Agcy.**—Picard Advertising, 250 W. 57th st., New York, N. Y.

PHEOLL MFG. CO., 5700 Roosevelt rd., Chicago, Ill. Screws, bolts, nuts, cold punched nuts, knurled nuts, threaded rods, washers. Mason Phelps, pres.; E. M. Whiting, vice.-pres., gen. mgr.; J. J. Schwander, secy.-treas.; J. A. Perry, sales mgr.; C. E. Whiting, adv. mgr.; F.P. Tisch, engr.; A. A. Schmid, pur. agt. **Det. Rep.**—H. E. Goeppel, 1709 Kales bldg.

PHILCO RADIO & TELEVISION CORP., 3701 N. Broad st., Philadelphia, Pa. Auto radios. Larry E. Gubb, pres.; Sayre M. Ramsdell, vice-pres.; William H. Grimditch, vice-pres.; Russell L. Heberling, vice-pres.; Howard McDaniel, secy.; John Ballantyne, treas.; Thomas A. Kennally, gen. sales mgr.; Ernest B. Loveman, adv. mgr.; G. Hope Little, pur. agt.; Harry Boyd Brown, Nat. merch. mgr.; Charles E. Carpenter, mgr. of tube sales. **Det. Rep.** — Philco Radio & Television Corp. of Michigan, Fort and Tenth sts. **Adv. Agcy.**—Hutchins Advertising Co., Cutler bldg., Rochester, N. Y.

PHILLIPS PUMP & TANK CO., 904 Evans st., Cincinnati, O. Service station equipment, underground storage tanks, stampings, general sheet metal products. H. Phillips, pres.; H. C. Bolsinger, secy.; N. D. Rosen, treas.; S. H. Frensdorf, gen. mgr.; Oscar Phillips, sales mgr.; Bertram Q. Phillips, adv. mgr.; Benj. Phillips, engr.; Clarence Dauwe, pur. agt.; Bernice Korb, Huber Gott.

PHINNEY-WALKER CO., Inc., 30 Irving Place, New York, N. Y. Automobile clocks, etc. C. E. Perry, pres., treas; J. P. Ambrose, sales mgr., secy.; **Det. Rep.**—H. H. Mundy, 15 Kirby East.

PHOENIX OIL CO., 2554 W. Fifth st., Cleveland, O. Oil soap, auto soap cleaner, motor oils, lubricants. M. J. Murphy, pres.; R. M. Murphy, vice-pres., treas; E. F. Horaks, gen. mgr.

PICK MFG. CO., West Bend, Wis. Replacement auto parts, universal joints, brake sleeves, hub caps, exhaust extensions, brake band, radiator caps, oil filters, grille guards, door handles. Carl Pick, pres., treas.; A. J. Pick, vice-pres.; Carl B. Rix, secy.; A. V. Wessler, gen. mgr., pur. agt.; A. W. Jonas, sales mgr. **Det. Rep.**—Fred Conley, 510 Stephenson bldg.

PIERCE AIRO, Inc., 440 Lafayette st., New York, N. Y. Radios. David Wald, pres.; L. N. Weiss, sales mgr.; Mark Glaser, engr.; B. Stohl, pur. agt.

PIER EQUIPMENT MFG. CO., 1200-1248 Milton st., Benton Harbor, Mich. Battery chargers, testers and analyzers, arc welders. E. C. Fieberts, pres.; F. G. Marshall, vice-pres. U. S. Dunn, secy., chief engr.; Edw. C. Fieberts, treas.

PIKE, WILLIAM CO., Inc., 319 Woodward ave., Detroit, Mich. Manufacturers agents. William Pike, pres., gen. mgr.; William J. Thompson jr., vice-pres., sales mgr.; C. M. Viering, pur. agt., asst. treas.

PINES WINTERFRONT CO., 1135 N. Cicero ave., Chicago, Ill. Radiator shutters, automatic and manual for cars, trucks and tractors, metal stampings. B. F. Stein, pres.; R. F. Cohn, vice-pres., gen. mgr. L. E. Nobert, vice-pres., asst. treas.; H. H. Crawford, sales mgr.; L. H. Metzger, adv. mgr., asst. sales mgr.; W. C. Agerell, engr. **Det. Rep.**— H. H. Crawford, Harry Strohm, Room 629, New Center bldg. **Adv. Agcy.**—Matteson-Fogarty-Jordan Co., Chicago, Ill.

PITTSBURGH FORGINGS CO., Thorne st., Corapolis, Pa. Automotive parts, drop and upset forgings. Edwin Hodge jr., chmn., pres.; R. A. Mitchell, vice-pres.; J. C. Bane jr., secy.; W. H. McGary, treas.; W. H. Stocking, adv. mgr., sales, mgr.; S. B. Davidson, engr.; S. W. Menzies, pur. agt.; L. E. Ruby, plt. mgr. at Jackson, Mich. **Det. Rep.**—Geo. E. Villerot, 8-254 General Motors bldg.

PITTSBURGH PLATE GLASS CO., 2200 Grant bldg., Pittsburgh, Pa. Duplate, Duolite, Aerolite. Clarence M. Brown, chmn.; H. S. Wherrett, pres.; H. B. Higgins, vice-pres.; F. W. Judson, vice-pres.; C. S. Lamb, secy.; F. W. Currier, treas.; R. B. Tucker, sales mgr.; E. L. Patton, adv. mgr.; J. A. Bechtel, pur. agt.; R. S. Wessels, dist. mgr. Detroit whse. **Det. Rep.**—R. S. Wessels, dist. mgr., 6045 Hamilton ave. **Adv. Agcy.**—Batten, Barton, Durstine & Osborn, 3500 Grant bldg., Pittsburgh, Pa.

PLASKON CO., Inc., 2112 Sylvan ave., Toledo, O. Molding compound. J. L. Rodgers jr., pres.; R. B. Harrison, vice-pres.; Horton Spitzer, vice-pres.; C. O. Marshall, secy.; W. R. Feldtman, treas.; W. N. Shepard, adv. mgr.; J. H. Jeffrey, engr. **Det. Rep.**—J. W. Gillette jr.; Stephenson bldg. **Adv. Agcy.**—T. J. Maloney, Inc., 381 4th ave., New York, N. Y.

PLYMOUTH MOTOR CORP., Div. of Chrysler Corp., 6334 Lynch rd., Detroit, Mich. Passenger and commercial cars. B. E. Hutchinson, chmn.; D. E. Eddins, pres., gen. mgr.; P. C. Sauerbrey, vice-pres. in chge. of mfg.; H. C. Moock, vice-pres. in chge. of sales; J. W. Frazer, L. G. Peed, Lester L. Collbert, K. T. Keller, J. E. Fields, W. Ledyard Mitchell, F. M. Zeder, vice-pres.; H. A. Davies, treas.; R. P. Fohey, secy.; L. D. Cosart, asst. sales mgr.; W. W. Romaine, dir. of adv. and sales prom.; N. F. Hadley, chief engr.; J. D. McCrimmon, dir. of serv.; K. G. Pound, dir. of distr. **Adv. Agcy.** — J. Stirling Getchell, Inc., 405 Lexington ave., New York, N. Y.

(See display advertising index)

POLLAK, JOSEPH CORP., 79-85 Freeport st., Boston, Mass. Trailer parts, lamps, connectors, switches, warning signals, clearance lamps. Joseph Pollak, chmn., pres.; Henry Brandt, vice-pres., gen. mgr., sales mgr.; G. M. Hemmer, secy.-treas.; W. J. Pollak, pur. agt. **Det. Rep.** H. G. Johnston, 12-216 General Motors bldg.

POLSON RUBBER CO., Garrettsville, O. Inner tubes of all types. H. B. Polson, chmn., pres.; C. A. Polson, vice-pres.; Paul A. Polson, vice-pres., sales mgr; R. D. Woolery, secy.-treas. gen. mgr.; H. A. Grundy, engr.; R. A. Reynolds, pur. agt.; Glenn Lewis, supt.

PONTIAC MOTOR DIV., General Motors Sales Corp., Pontiac, Mich. Motor cars. H. J. Klingler, gen. mgr.; C. P. Simpson, sales mgr.; F. A. Berend, adv. mgr.; B. H. Anibal, engr.; F. J. McLaughlin. **Adv. Agcy.**—MacManus, John & Adams, Fisher bldg., Detroit, Mich.

POOR & CO., Canton Forge and Axle Works, 2025 Dueber ave., S. W., Canton, O. Drop forgings. R. A. McLaughlin, gen. mgr.; R. A. Lothamer, pur. agt.

POSITIVE LOCK WASHER CO. OF AMERICA, 181 Miller st., Newark, N. J. Washers. locks, spring lock washers, etc. E. E. Ross, pres., treas.; George H. Denman jr., vice-pres.; D. W. Beckwith, gen. mgr., secy., pur. agt.; B. L. deNourie, sales mgr., adv. mgr.; **Det. Rep.**—Miles L. Higgins, 2921 E. Grand blvd. **Adv. Agcy.**—Neisser-Meyerhoff, Inc., 759 N. Milwaukee st., Milwaukee, Wis.

POTTER & JOHNSTON MACHINE CO., 1027 Newport ave., Pawtucket, R. I.

(Continued on Next Page)

CHECK LIST OF AUTOMOTIVE AND OTHER PRODUCTS MANUFACTURED BY ELECTRIC AUTO-LITE COMPANY AND SUBSIDIARIES

AND SERVICED BY THE WORLD-WIDE NETWORK OF AUTO-LITE SERVICE

ALEMITE DIE CASTING & MFG. DIVISION
Woodstock, Ill.

ZINC AND ALUMINUM BASE DIE CASTINGS.
FOR FOLLOWING INDUSTRIES:
AUTOMOTIVE.
INDUSTRIAL.
HOUSEHOLD.
ELECTRICAL.
MECHANICAL.

AMERICAN ENAMELED MAGNET WIRE CO.
Port Huron, Mich.

DRAWN COPPER WIRE.
ENAMELED MAGNET WIRE.
AUTOMOTIVE IGNITION CABLE.
RADIO CABLE.
RUBBER COVERED WIRE.
COMMUTATOR SEGMENTS.
IGNITION COILS.
WIRING HARNESS.
BATTERY CABLE
FLEXIBLE CABLES
VEGA HIGH TEMP. ENAMEL WIRE

AMERICAN LEATHER PRODUCTS CO.
Indianapolis, Ind.

AUTOMOTIVE PROTECTIVE BOOTS.
PORTFOLIOS, CATALOG AND BRIEF BAGS.
GOLF BAGS, DUFFEL BAGS, GUN CASES, ETC.
SPECIALLY DESIGNED MADE-TO-ORDER SALES. DISPLAY EQUIPMENT.

BUCKEYE BUMPERS DIVISION
Springfield, Ohio

AUTOMOBILE BUMPERS
BUMPER GUARDS, ETC.
SPRING COVERS.

COLUMBUS AUTO PARTS CO.
Columbus, Ohio

TIE RODS.
DRAG LINKS
MACHINED UPSET FORGINGS.

CORCORAN-BROWN LAMP DIVISION
Cincinnati, Ohio

AUTOMOBILE HEAD, TAIL, COWL, FENDER AND FOG LIGHTS
ELECTRIC METER TEST CABINETS
ELECTRIC TRANSFORMER CABINETS.
AVIATION LIGHTING EQUIPMENT.

THE PERMA-MAID COMPANY, INC.
Cincinnati, Ohio

"PERMA-MAID" STAINLESS STEEL KITCHEN UTENSILS

THE ELECTRIC AUTO-LITE CO.
Toledo, Ohio

STARTING MOTORS
STARTING DRIVES
GENERATORS: ALL TYPES 100 TO 1200 WATTS
DISTRIBUTORS: MANUAL, AUTOMOTIVE, VACUUM AND SELECTIVE CONTROL
CIRCUIT BREAKERS: THERMOSTATIC AND MAGNETIC
VOLTAGE REGULATORS: 2-STEP AND VIBRATING
STARTING SWITCHES: MECHANICAL, VACUUM AND ELECTRICAL
HORNS: VIBRATOR, HIGH FREQUENCY ELECTRIC AND AIR
IGNITION COILS
CONDENSERS
RESISTORS

ELECTRIC AUTO-LITE, LTD.
Sarnia, Ontario

STARTING MOTORS
STARTER DRIVES
GENERATORS: ALL TYPES
DISTRIBUTORS: MANUAL, AUTOMATIC, VACUUM AND SELECTIVE CONTROL
CIRCUIT BREAKERS: THERMOSTATIC AND MAGNETIC
VOLTAGE REGULATORS: 2-STEP AND VIBRATING
STARTING SWITCHES: MECHANICAL, VACUUM AND ELECTRICAL
IGNITION COILS
CONDENSERS
RESISTORS

THE ELECTRIC AUTO-LITE CO.
Foundry Division
Fostoria, Ohio

PRODUCTION GREY IRON CASTINGS
AUTOMOBILE EXHAUST TYPE HEATERS

THE ELECTRIC AUTO-LITE CO.
Spark Plug Division
Fostoria, Ohio

"AUTO-LITE" SPARK PLUGS

MOTO METER GAUGE & EQUIPMENT DIVISION
LaCrosse, Wisc.

MAGNETIC SPEEDOMETERS
ELECTRIC GASOLINE GAUGES
HYDROSTATIC FUEL LEVEL GAUGES
AMMETERS
DISTANCE TYPE HEAT INDICATORS—AUTOMOTIVE
WARN-O-LITE SIGNALLING DEVICES
RADIATOR TYPE MOTO METERS
BOURDON TUBE PRESSURE GAUGES
AIRCRAFT THERMOMETERS
AIRCRAFT PRESSURE GAUGES
AIRCRAFT FLIGHT INDICATING DEVICES
EXHAUST GAS ANALYZERS
INDUSTRIAL PRESSURE GAUGES
INDUSTRIAL VACUUM GAUGES
INDUSTRIAL PRESSURE RECORDING INSTRUMENTS
INDUSTRIAL RECORDING THERMOMETERS
TIRE TESTERS
HUB CAPS
RADIATOR AND TANK CAPS

PREST-O-LITE STORAGE BATTERY CORPORATION
Indianapolis, Ind.

AUTOMOBILE STORAGE BATTERIES
BUS AND TRUCK BATTERIES
LIGHTING PLANT BATTERIES
AIRCRAFT BATTERIES
PREST-O-GRILL—OUTDOOR COOKER

PREST-O-LITE STORAGE BATTERY, LTD.
Toronto, Ont.

ELECTRIC STORAGE BATTERIES:
AUTOMOBILE STARTING AND LIGHTING
BUS AND TRUCK
RADIO
FARMLIGHTING
MARINE
TELEPHONE AND TELEGRAPH

BAY MFG. DIVISION
Bay City, Mich.

METAL DECORATIVE LITHOGRAPHING
ETCHED DIALS AND FACE PLATES
BAKELITE MOLDED PRODUCTS
HYDRAULIC STOPLIGHT SWITCHES
PANEL AND HEADLIGHT SWITCHES
AUTOMOTIVE DASH ASSEMBLIES

SOUTHWEST BATTERY CORPORATION
Oklahoma City, Okla.

STORAGE BATTERIES FOR AUTOMOTIVE APPLICATION

STERLING CABLE CORP'N
Port Huron, Mich.

REPLACEMENT AUTOMOTIVE CABLES
IGNITION CABLE SETS
BATTERY CABLE
SPOOL CABLE
TERMINALS

USL BATTERY CORP'N
Niagara Falls, N. Y.

ELECTRIC STORAGE BATTERIES:
AUTOMOBILE
BUS, TRUCK AND TAXICAB
ELECTRIC VEHICLE
INDUSTRIAL ELECTRIC TRUCK
RAILROAD CARLIGHTING AND AIR CONDITIONING
RAILROAD SIGNAL
TELEPHONE, TELEGRAPH AND CABLE STATION
MARINE AND AIRWAY BEACON
FIRE ALARM
MINE LOCOMOTIVE
DIESEL MOTOR STARTING
POWER HOUSE STANDBY AND CONTROL
FARMLIGHTING
RADIO
MARINE
HOSE CLAMPS

OWEN-DYNETO DIVISION
Syracuse, N. Y.

STARTING MOTORS
GENERATORS
WINDSHIELD WIPERS (ELECTRIC)
BATTERY CHARGE REGULATORS
HEATER BLOWER MOTORS
USL ELECTRIC ARC WELDERS
WELDING WIRE AND ACCESSORIES
FULL VOLTAGE REGULATED BUS AND TRUCK GENERATORS
MAGNETIC STARTING SWITCHES

USL BATTERY CORPORATION OF CALIF.
Oakland, Calif.

STARTER BATTERIES FOR AUTOMOTIVE APPLICATION
BUS AND TRUCK BATTERIES

USL BATTERY LIMITED
Toronto, Ont.

STORAGE BATTERIES:
AUTOMOBILE STARTING AND LIGHTING
BUS AND TRUCK
RADIO
FARMLIGHTING
MARINE
TELEPHONE AND TELEGRAPH

Who's Who

(Continued from Previous Page)

Automatic chucking and turning machines, milling machines, horizontal and vertical types. W. Wallace Potter, pres.; W. R. Winter, vice-pres.; N. R. Earle, vice-pres.; M. S. Curtis, vice-pres.; J. E. Makant, vice-pres.; L. J. Orr, vice-pres.; J. P. Cunningham, vice-pres.; F. Potter, secy.; T. Durell, treas. **Det. Rep.**—G. Tell DuBois, 8-145 General Motors bldg.

POWELL MUFFLER CO., Inc., 729 Broad st., Utica, N. Y. Exhaust mufflers, pipes, tail pipes, rubber spring bushings. Herbert S. Powell, pres., sales mgr., Ray Calhoun, pur. agt., secy.; **Det. Rep.**—Morris Saks, Euclid ave. at Lakeview, Cleveland, O.

POWELL PRESSED STEEL CO., Hubbard, O. Pressed steel stampings, material handling equipment, advertising metal displays. W. J. Powell, pres., gen. mgr.; H. S. Wylde, vice-pres., sales mgr., adv. mgr.; E. J. Powell, engr., secy.; W. S. Davis, treas. **Det. Rep.**—Stampings, G. W. Van Syoc, 5-220 General Motors bldg. Material handling equipment. S. T. Keller, 7310 Woodward ave.

PRATT & LAMBERT, Inc., (Dibble Color Co., Detroit), 73-97 Tonawanda st., Buffalo, N. Y. Synthetic enamels, lacquers, paints, and varnishes. H. E. Webster, pres.; R. W. Lindsay, vice-pres.; W. P. Werheim, vice-pres.; T. E. Murphy, mgr. indus.. div.; J. F. Maycock, mgr. railway and trans. div. **Det. Rep.**—W. E. Biggers, 415 Fisher bldg.

PRATT, WILLIAM E. MFG. CO., Henderson and Norton aves., Joliet, Ill. Malleable iron castings, taper roller bearings. Mrs. Wm. E. Pratt, pres.; F. E. Clark, vice-pres., gen. mgr.; W. C. Manthey, vice-pres.; A. F. Boehm, secy-treas.; pur. agt.; J. T. Millar, asst. secy.; T. M. Jordan, sales mgr.

PREMIER RUBBER MFG. CO., 1 Edmund st. Dayton, O. Custom-made moulded rubber parts. Joseph F. Westendorf, pres.; Harry H. Gerstner,, vice-pres.; Louis R. Jacobs, prod. mgr., pur. agt.; James L. Fitzgerald, supt.; John Westendorf, gen. mgr., sales mgr., adv. mgr.; Raymond Jacobs, engr.; Joseph L. Leibold, asst. secy.; D. L. Westendorf, asst. treas. **Det. Rep.**—Wm. R. Fitzgerald, 2-265 General Motors bldg.

PRESSED METALS OF AMERICA, Inc., Box 449, Port Huron, Mich. Shackles, pivots, independent wheel suspension parts and screw machine products. J. W. Leighton, pres., gen. mgr.; H. L. Nussbaum, vice-pres. C. F. Krueger, sales mgr.; O. C. Richert, engr.; W. P. Carson, pur. agt., secy.; Wm. Wade, asst. treas, plant supt. **Det. Rep.**—Clement F. Krueger, 234 Curtis bldg.

PRESSURE CASTINGS, Inc., 21500 St. Clair ave., Cleveland, O. Zinc and aluminum alloy die castings, dies for castings. George H. Ralls, pres., gen. mgr.; Dan K. Foster, vice-pres., secy.; Joseph Obermayer, engr.; John A. Rein, pur. agt.; L. J. Tischler, fact. mgr.

PREST-O-LITE BATTERY CO., Inc., P. O. Box 1655, Indianapolis, Ind. Electric storage batteries. J. H. McDuffee, pres.; H. E. Komitch, vice-pres., sales mgr., adv. mgr.; F. H. Landwehr, secy.; J. B. Fenner, treas.; N. E. Hehner, engr.; R. A. Nowlan, pur. agt.; R. M. Worth, serv. mgr.; R. C. Thompson, exp. mgr. **Det. Rep.**—W. J. Mergard, 323 Pottawatomi blvd., Royal Oak, Mich. **Adv. Agcy.**—Leo Burnett, Chicago, Ill.

(See display advertising index)

PRICE BATTERY CORP., 123 S. Broad st., Philadelphia, Pa. Storage batteries. W. F. Price, pres., F. M. Price, vice-pres.; T. A. Larkin, secy.; M. H. McQuade, treas.; R. E. Hoeltzel, sales mgr., adv. mgr.; G. S. Biles, engr.; A. A. Andreason, pur. agt.; S. Dershwin, expt. mgr. **Adv. Agcy.**—B. W. Stelle, Inc., Philadelphia.

PROOF MACH. & BRASS FDRY. CO., 936 E. 72nd st., Cleveland, O. Battery terminals, cables, tablets, castings, etc. James Plachy, pres., gen. mgr., sales mgr.; Adam Jackson, vice-pres.; Joseph Palfy, secy.-treas. **Adv. Agcy.**—Powers House, Cleveland, O.

PROTECTION PRODUCTS CO., 615 N. Aberdeen st., Chicago, Ill. Seat covers, cushions, screens, radiator winter fronts. J. W. Osten, pres., treas.; W. A. Oink, vice-pres., adv. mgr., pur agt.; J. F. Ryan, gen. mgr., sales mgr. **Det. Rep.**—David A. Kleinman, 4264 Woodward ave.

PURITAN SOAP CO., Inc., 573 Lyell ave., Rochester, N. Y. Automotive chemicals, soaps and cleaners. Alexander Beach, chmn., pres.; John F. Bush jr., vice-pres., gen. mgr.; F. Dwight Sage, secy.-treas. **Adv. Agcy.**—Hutchins Advertising Co., Cutler bldg., Rochester, N. Y.

PYRENE MFG. CO., 560 Belmont ave., Newark, N. J. Tire chains and accessories, metal finishes, etc. Edward A. Clapp, pres., treas.; Edward J. Waring, vice-pres., gen. mgr.; Edward G. Weed, vice-pres., secy.; George H. Boucher, sales mgr.; Truman O. Young, asst. adv. mgr.; William R. Rea, engr.; Harry L. Friedauf, pur. agt. **Det. Rep.**—Bruce R. Fleming, 6432 Cass ave.

Q

QUAKER STATE OIL REFINING CORP., Quaker State bldg., Oil City, Pa. Motor oils and lubricants. H. J. Crawford, pres.; S. Messer, J. D. Berry, vice-pres.; W. R. Reitz, secy., asst. treas.; C. D. Berry, treas., asst. secy.; J. M. Koch, sales mgr.; H. S. Morris, adv. mgr.; L. R. Forker, pur. agt.; G. B. Hunter, supt. of refineries. **Adv. Agcy.**—Kenyon & Eckhart, Inc., New York, N. Y.

(See display advertising index)

R

RADIATOR SPECIALTY CO., 1722 Dowd rd., Charlotte, N. C. Radiator repair, cooling system cleaner, gasket and joint sealing compound, remote control gas tank locks. I. D. Blumenthal, chmn., pres., gen. mgr.; S. Blumenthal, vice-pres.; S. Kraft, secy.; Harry F. Meltsner, treas., sales mgr.; H. Blumenthal, pur. agt. **Det. Rep.**—S. L. Schwen, 553 Plymouth st., Toledo, O.

RAILWAY EXPRESS AGENCY, Inc. 230 Park ave., New York, N. Y. Rail and air express nation wide transportation service. L. O. Head, pres.; E. R. Merry jr., secy.; W. B. Clark, vice-pres., treas.; K. N. Merritt, gen. sales mgr., adv. mgr.; C. G. Peterson, engr.; M. L. Tynan, pur. agt. **Det. Rep.**—L. D. Stout, supt., 941 Howard st., **Adv. Agcy.**—Caples Co., 230 Park ave., New York, N. Y.

RAJAH CO., 53 Locust ave., Bloomfield, N. J. Terminals, bakelite hoods, safety nipples, hand crimping tools, spark plugs and terminals. Robert A. Bell, pres.; Elizabeth G. Keeler, secy.; Geo. Berthold, treas, engr. **Adv. Agcy.**—Rudolph Guenther-Russell Law, 131 Cedar st., New York, N. Y.

RAMSEY ACC. MFG. CORP., 3693 Forest Park blvd., St. Louis, Mo. Ramco piston rings, Ramco piston skirt expanders. J. A. Ramsey, pres., sales mgr.; H. Ramel, vice-pres., compt.; W. G. Myers, vice-pres., adv. mgr.; C. A. Marien, vice-pres., engr.; L. A. Ramsey, secy.-treas. **Adv. Agcy.**—Ragland Van Auken, Chicago, Ill.

RAYBESTOS DIV. of Raybestos-Manhattan, Inc., R. R. and Bostwick ave., Bridgeport, Conn. Brake lining, brake blocks, clutch facings, rivets, brake service equipment, packings, fan belts and hose. M. F. Judd, gen. mgr.; R. B. Davis, gen. sales mgr.; Norman Leeds jr., asst. sales mgr.; S. E. Shepard, mdse., & adv. mgr.; Dr. F. C. Stanley, chief engr.; J. D'Louhy, pur. agt. **Det. Rep.**—S. J. Pugh, 16206 Bentler st. **Adv. Agcy.**—The Wales Advertising Agency, 230 Park ave., New York, N. Y.

RAYMOND MFG. CO., Div. Associated Spring Corp., 226 S. Center, Corry, Pa. Mechanical springs, small stampings, wire forms. F. F. Barnes, pres.; F. M. Raymond, vice-pres.; F. E. Whittlesey, secy.-treas., gen. mgr.; J. E. Mount, sales mgr.; J. E. Lewis, engr.; C. H. Holden, pur. agt.; E. W. Feldt, fcty. mgr.

RAYMOND PRODUCTS CO., 1212 Rust ave., Saginaw, Mich. "Travelo" trailer coaches. C. E. Raymond, chmn., pres., gen. mgr.; J. F. Luxton, vice. pres.; H. W. Longworth, secy., sales mgr., adv. mgr.; E. E. Raymond, treas., engr., pur. agt. **Det. Rep.**—Carl Rau, 19600 Woodward ave. **Adv. Agcy.**—Jaqua Co., Grand Rapids, Mich.

RAY-O-VAC CO., 2317 Winnebago st., Madison, Wis. Flashlights, batteries, ignition and telephone batteries. W. W. Cargill, pres., gen. mgr.; E. B. Ott, vice-pres.; L. H. Keller, vice-pres., sales mgr.; W. A. Hastings, secy.-treas; A. C. Morgenson, asst treas.; W. M. Flynn, adv. mgr.; Ralph E. Ramsay, engr.; L. G. Berigan, pur. agt.; C. L. Clardy, asst. gen. sales mgr. **Det. Rep.**—U. J. Schlotter, 1220 Logan st., Grand Rapids, Mich. **Adv. Agcy.**—Arthur Towell, Inc., 114 N. Carroll st., Madison, Wis.

RCA MFG. CO., Inc., 201 N. Front st., Camden, N. J. Standard and all-wave radio receivers, radio phonographs, auto radios etc. David Sarnoff, chmn., G. K. Throckmorton, pres.; F. H. Corregan, secy., E. F. Haines, treas.; R. Shannon, vice-pres., gen. mgr.; H. C. Bonfig, comm. vice-pres.; T. F. Joyce, adv. mgr.; L. M. Clement, vice-pres. in chge. engr.; N. A. Mears, vice-pres. in chge. pur.. **Det. Rep.**—H. T. Stockholm, RCA Mfg. Co., Inc., 1010 Book Tower; H. D. Mysing, 505 Curtis bldg. **Adv. Agcy.**—Lord & Thomas, New York, N. Y.

READING CHAIN & BLOCK CORP., 2100 Adams st., Reading, Pa. Hand and electric traveling cranes, hand and electric hoists, monorail systems. Fred A. Howard, pres.; gen. mgr.; Philip K. Howard, vice-pres., sales mgr.; Frank M. Howard, secy.-treas.; A. K. Hartzell, engr.; Fred Howard, pur. agt. **Det. Rep.**—Hanson equipment Co., 253 Vinewood ave. **Adv. Agcy.**—Wessinger-Fotz, Inc., Lancaster, Pa.

RECORDING & STATISTICAL CORP., 102 Maiden Lane, New York, N. Y. Recording service—no manufacture. R. E. Fletcher, chmn.; G. C. Kingsley, pres.; L. F. Baker,, E. U. Richards, E. E. L. Taylor, F. D. Warren, vice-pres.; F. K. Seward, secy.; M. Hudders, treas. **Det. Rep.**—J. W. J. McManus, 112 Madison ave.

REEVES PULLEY CO., 1227 7th st., Columbus, Ind. Variable speed transmission, vari-speed motor pulley, vari-speed motodrive. G. L. Reeves, pres.; C. M. Reeves, vice-pres.; Paul B. Reeves, vice-pres.; R. F. Reeves, secy.-treas., sales mgr.; J. M. Jewell, adv. mgr.; J. Dowell, pur. agt. **Det. Rep.**—R. H. McLean, 2832 E. Grand blvd. **Adv. Agcy.**—Caldwell-Baker Co., Indianapolis.

REHNBERG-JACOBSON MFG. CO., Inc., 2135 Kishwaukee St. Rockford, Ill. Needle bearing assembling machines, drilling machines, drill units, multiple spindle drill heads, automatic hopper feeds, etc. Axel Rehnberg, pres., engr.; Gust A. Jacobson, secy.-treas. **Det. Rep.**—John E. Livingstone Co., 7310 Woodward ave.

RELIABLE JACK CO., 1401 West Second, Dayton, O. Jacks. W. B. Runyan, pres.; R. G. Fisher, vice-pres., gen. mgr.; G. W. Fribley, vice-pres., sales and adv. mgr.; C. W. Swank, treas.; F. B. Copeland, engr.; R. G. Fisher, pur. agt. **Det. Rep.**—Geo. W. Wiard, 12097 Linwood ave. **Adv. Agcy.**—Richardson Oswald, NBC bldg., Cleveland, O.

REMCO PRODUCTS CORP., State and Hay sts., York, Pa. Automobile replacement valves. Robert E. Manley, pres., gen. mgr.; Joseph E. Abt, vice-pres.; W. D. Rosenberger, vice-pres.; Paul E. Bare, secy.; Chester G. Myers, treas.; Robert E. Manley jr., sales mgr.; Norman P. Hewitt, adv. mgr.; Ottis Reichard, engr.; W. E. Speck, pur. agt. **Det. Rep.**—Victor Bergman, Chicago, Ill. **Adv. Agcy.**—Norman Pancoast Hewitt, Woodbury, N. J.

REO MOTOR CAR CO., Lansing, Mich. Trucks, ½ to 4-ton (4500 to 24000 gross), coaches. Rolland Campbell, chmn.; Fred Glover, pres., gen. mgr.; C. W. Woods, secy.-treas.; Frank N. Morgan, sales mgr.; A. L. Struble, adv. mgr.; H. A. Flogaus, engr. **Adv. Agcy.**—Geer Murray Co., Oshkosh, Wis.

REPUBLIC GEAR CO., 2197 Beaufait ave., Detroit, Mich. Rear axle gears, cases and shafts, transmission gears and parts, flywheel starter gears, cylinder heads. Thos. R. Navin, pres., gen. mgr.; John S. Dages, vice-pres., sales mgr.; E. H. Jenks, secy.-treas.; C. W. Varin, expt. mgr.; F. J. Sanford, engr.; R. E. Winans, pur. agt.

REPUBLIC RUBBER DIV., Lee Tire & Rubber Corp., Youngstown, O. Belting, hose, packing, molded goods, extruded products, mats and specialties. John J. Watson, chmn., pres.; A. A. Garthwaite, vice-pres., treas.; O. S. Dollison, vice-pres. of sales; H. W. Croysdale, vice-pres. of mfg.; Henry Hopkins jr., secy.; E. M. Ikirt, asst. treas.; T. C. Boase, asst. secy.; H. P. Schultz, sales mgr., adv. mgr.; C. E. McCormick, engr.; P. S. Kirchner, pur. agt. **Det. Rep.**—E. J. Schwartz, 801 New Center bldg. **Adv. Agcy.**—Meek & Wearstler, Inc., 20 W. Front st., Youngstown, O.

REPUBLIC STEEL CORP., Republic bldg., Cleveland, O. Steels, all types. T. M. Girdler, chmn. of board; R. J. Wysor, pres.; N. J. Clarke, vice-pres. in chge. of sales; M. A. Wick, vice-pres. in chge. of finance; C. M. White, vice-pres. in chge. of operations. W. W. Hancock, secy.-treas. D. B. Gillies, vice-pres.; J. M. Schlendorf, asst. vice-pres. of sales; N. W. Foy, gen. mgr. of sales; M. H. Schmid, sales mgr. of alloy steel div.; S. A. Knisely, adv. mgr.; E. C. Smith, chief metallurgist; C. A. Ilgenfritz, mgr. of pur.; F. J. Laskey, gen. pur. agt.; C. H. Elliott, W. M. Neckerman, asst. vice-pres. in chge. of operations; J. Kahn, vice-pres. in chge. of product devel.; P. F. Boyer, comptroller. **Det. Rep.**—A. Schaeffer, dist. sales mgr., Republic Steel Corp., 2008 Fisher bldg. **Adv. Agcy.**—G. M. Basford Co. 422 Leader bldg., Cleveland, O.

REVERE COPPER AND BRASS, Inc., 230 Park ave., New York, N. Y. Copper, brass, bronze and other non-ferrous products manufactured in the form of plates, sheets, strips, rolls, rods, shafting, wire, tubes, extruded and drawn shapes, die pressed and hammered forgings, welding rods, also small stampings. Barton Haselton, chmn.; C. Donald Dallas, pres.; J. A. Doucett, vice-pres.; C. A. Macfie, vice-pres, sales mgr.; Rollo E Falk, vice-pres.; J. L. Russell, secy.-treas.; N. A. Schuele, adv. mgr.; **Det. Rep.**—Revere Copper and Brass, Inc., 5851 W. Jefferson ave. **Adv. Agcy.**—Kenyon & Eckhardt, Inc., 247 Park ave., New York, N Y.

REX-HIDE INC., East Brady, Pa. Rubber tire flaps. Balloon windshield wiper blades, rubber license plate frames, carbon-base brake lining, safety ignition cut-offs. N. E. Graham, pres.; A. B. Kempel, vice-pres., gen. mgr.; F. L. Ludwick, secy.-treas.; W. H. Klein, pur. agt. **Det. Rep.**—W. A. Nelson, Fort Shel-

(Continued on next page)

Again in 1939, Harrison radiators will be used as standard equipment on hundreds of thousands of new cars. For each of these new models, Harrison engineers work with the car manufacturer's engineers in developing a radiator that meets the cooling requirements of the individual motor and conforms to the space limitations of the car's design. A sample radiator, on an experimental car, is tested on Harrison's car-dynamometer, where controlled air conditions duplicate those of actual hot-weather driving.

When the radiator is finally approved, Harrison performs every operation—from the designing and making of tools and dies, to the last step in the manufacture of the finished product.

Throughout production, frequent tests and inspections help to maintain the quality that insures the satisfaction of owners of Harrison-equipped cars. Harrison Radiator Division, General Motors Corp., Lockport, N. Y.

HARRISON

RADIATORS · THERMOSTATS · CAR HEATERS · HEAT EXCHANGERS

TIME TESTED
McQUAY-NORRIS
PISTON RINGS
PISTONS
PINS
1910 1938
VALVES
BEARINGS
PUMP PARTS
BOLTS-BUSHINGS
PROVEN IN SERVICE

Who's Who

(Continued from Previous Page)

by Hotel. Adv. Agcy.—Smith, Hoffman & Smith, Inc., 323 Fourth ave., Pittsburgh, Pa.

REX MFG. CO., Connersville, Ind. Several standard types of high grade, light, two-wheel, commercial farm and camping trailers. C. C. Hull, pres.; M. R. Hull, vice-pres.; G. W. Ansted, secy., treas.; E. H. Habig, sales and adv. mgr. trailer div.; W. H. Gorton, engr.; M. Lair Hull, pur. agt. Adv. Agcy.—Russell M. Seeds Co., Indianapolis, Ind.

REYNOLDS & REYNOLDS CO., Washington and Dudley sts., Dayton, O. Accounting systems and supplies, general line of printing. L. H. Forster, pres., gen. mgr. Stoddard Reynolds, vice-pres.; John T. Bell, secy.-treas.; Geo. Harmon, engr.; W. P. Bonner, pur. agt. Det. Rep. — John Wallace, D. D. Bollinger, Palmer Bollinger, 112 West Willis.

REYNOLDS SPRING CO., Bridge and Water st., Jackson, Mich. Cushion springs, molded plastic parts. C. G. Munn, pres.; D. D. Sherman, vice-pres., gen. mgr.; J. H. Merrell, E. W. McIntosh, R. A. Austin, vice-pres.; E. W. Miller, secy.-treas.; J. G. Rossiter, sales mgr. plastic div.; E. W. McIntosh, sales mgr. spring div.; J. G. Rossiter, adv. mgr.; C. S. Reed, engineer; R. A. Austin, pur. agt. Det. Rep.—E. W. McIntosh, 414 Fisher bldg. Adv. Agcy.—Geo. L. Kirkgasser, Chicago, Ill.
(See display advertising index)

RHODES, JAMES H. AND CO., 153-159 W. Hubbard st., Chicago, Ill. Sponges, chamois, felt, pumice stone, steel wool, abrasives, auto polishing felts. Arthur J. Roth, chmn., pres.; L. E. Diamond, vice-pres., gen. mgr., sales mgr.; Horace L. Geddes, vce-pres.; A. N. Suddouth, vice-pres.; A. Benj. Roth, secy.-treas.; A. J. Roth jr., adv. mgr.; H. J. Neitzel, pur. agt.; F. D. Conger, asst. sales mgr.; I. M. Slepicka, felt dept.; W. E. Heinicke, sponge dept. Det. Rep.—Carl J. Thor, 205 Machinery bldg.

RHODE ISLAND AUTOMOBILE DEALERS ASSN., Chamber of commerce, Providence, R. I. Frank S. Shy, pres.; P. H. Graves, vice-pres.; Wayne L. Langley, secy.; Harold S. Lanphear, treas.

RHODE ISLAND TRUCK OWNERS ASSN., Inc., 11 West Friendship st., Providence, R. I. William R. Harrall, pres., John A. Woodward, vice-pres.; Franklin S. Eggleston, secy., gen. mgr.; John A. Creamer, treas.

RICHARDS-WILCOX MFG. CO., 333 Third st., Aurora, Ill. Overhead conveying equipment, fire doors and hardware, garage door hardware, electric door operators. W. H. Fitch, pres., gen. mgr.; Lee Mighell, vice-pres.; Milton D. Jones, secy., sales mgr.; C. A. Rasey, adv. mgr.; E. J. G. Phillips, engr.; C. J. Nelson, pur. agt. Det. Rep.—E. F. Brumbaum, 2457 Woodward ave. Adv. Agcy.—Roche, Williams & Cunnyngham, 310 S. Michigan ave., Chicago, Ill.

RICH FOGLITE, Inc., 3123 Belmont st., Bellaire, O. Fog lights for automobiles, trucks and buses. B. Kapmer, pres., treas., A. McKilven, vice.-pres.; I. E. Rich, secy., gen. mgr., pur. agt., adv. mgr. Franklin S. Lewis, sales mgr., engr. Det. Rep.—W. M. Scotty Hamilton, 22612 Beech st., Dearborn, Mich.

RICH MFG. CORP., Battle Creek, Mich. Automotive valves. Geo. R. Rich, pres.; Geo. E. Rich., vice-pres; S. C. Coleman, vice-pres., Howard H. Rich., secy.-treas.; F. H. Bourke, sales mgr.; R. J. Gibson, engr. Det. Rep.— F. H. Bourke, General Motors bldg.

RIESS EQUIPMENT CO., 900 Water st., Pottstown, Pa. Brake drum lathes. Charles B. Roeller, pres.; Kenneth Howard, secy.; L. E. Orgill, treas., pur. agt.

RIESS MFG. CO., 315 S. Union st., Kokomo, Ind. Automotive service equipment, brake relining equipment, brake drum lathes, wheel aligning equipment. Chas. B. Roeller, chmn., pres.; R. B. Plummer, vice-pres., sales mgr., adv. mgr.; Dr. Robt. S. Heffner, secy., A. E. Blucher, treas, E. D. McNeal, engr.; Walter Mead, pur. agt.

RINCK McILWAINE, Inc., 16 Hudson st., New York, N. Y. Garage mechanic's tools. Walter Rinck, pres.; John J. McGuickin, vice-pres.; George McIlwaine, secy.-treas. Det. Rep.—Roger Lymmo, 1116 W. Washington st., Ft. Wayne, Ind.

RIVETT LATHE & GRINDER, Inc., 22 Riverview rd., Brighton, Boston, Mass. Precision bench lathes, internal universal grinders, pulsolator automatic oil lubricator systems. Thorvald S. Ross, gen. mgr.; Albert B. Hunt, sales mgr.; Frederick C. Blanchard, engr.

ROCHESTER MFG. CO., Inc., Rockwood st., Rochester, N. Y. Indicating guages for liquid level, pressure and temperature. Herbert Hastings, pres., treas.; G. S. Hastings, vice-pres.; Wm. Mulcahy, secy., gen. mgr., pur. agt.; L. I. Hall, sales mgr.; C. L. Hastings, adv. mgr.; G. E. Ford, engr. Adv. Agcy.—Scrivener & Co., Rochester, N. Y.

ROCK RIVER WOOLEN MILLS, 1405 Riverside st., Janesville, Wis., Woolen broadcloth for automobile upholstery. Allyn D. Warren, pres.; James B. Tait, vice-pres., gen. mgr.; T. C. Peacock, secy.,-treas. Det. Rep.—V. C. Cramer, 59 Connecticut ave., Highland Park.

ROCKFORD DRILLING MACHINE DIV., Borg-Warner Corp., Catherine st., Rockford, Ill. Spring-loaded clutches, overcenter clutches., E. C. Traner, pres., gen. mgr.; E. C. Shields, vice-pres., sales mgr.; F. M. Palmquist, asst. secy.-treas.; G. L. Christianson, adv. mgr.; R. A. Carlson, engr. M. E. Carlson, pur. agt. Det. Rep.—E. C. Shields, 4-128 General Motors bldg. Adv. Agcy.—C. A. Corrigan, 825 N. Main st., Rockford, Ill.

ROGERS PRODUCTS CO., Inc., 3711 Hudson, blvd.; Jersey City, N. J. Lubricating equipment, grease guns. Charles L. Zabriskie, pres., secy.; Herman Albertine, vice-pres., engr.; B. L. Hoffman, treas.; A. P. Thomas, sales mgr.

ROHN & HAAS CO., Inc., 222 W Washington sq., Philadelphia, Pa. Plexiglas, colorless transparent plastic sheets. Crystalite, acrylic moulding powder. Chemicals for treating textiles, baits and chemicals for the leather industry, synthetic resins for the paint industry, Tego Bond, for laminating wood. Otto Haas, pres.; E. C. B. Kirsopp, vice pres., S. C. Kelton, secy. Dr. D. S. Frederick, Plexiglas div.; Dr. D. H. Powers, text. div. Det. Rep.—W. E. Biggers, 415 Fisher bldg.

ROLLER BEARING CO OF AMERICA, Whitehead rd., Trenton, N. J. 20th century bearings, 20th century full compliment bearings, solid and spiral roller bearings, cam followers. Joseph C. Trainer, chmn., treas.; Raymond E. Trainer, pres.; Francis Trainer, vice.-pres., secy.; E. C. Gainsborg, gen. mgr.; M. H. Lemell, engr. Det. Rep.—W. S. Turner, 742 New Center bldg.

ROLLING-HOME TRAILER CO., 1739 W. Pico st., Los Angeles, Calif. Rolling-home house trailers. Ted Smith, mgr. partn. and engr.; Ralph Waddell, partn. in chge. of prod.; Glenn Wynkoop, sales mgr.; Fred C. Smith, adv. mgr.; Henry G. Farthing, pur. agt. George Lesher, shop supt.; Henry G. Farthing, C. A., auditor. Adv. Agcy.—Fred C. Smith, 1739 W. Pico st., Los Angeles, Calif.

ROME-TURNEY RADIATOR CO., Canal st., Rome, N. Y. Water-air cooled refrigeration condensers, evaporators, etc. W. L. Lynch, pres., gen. mgr.; J. C. Lynch, vice-pres.; J. J. Boylan, secy.; W. L. Lynch, treas.; J. M. Shannon, sales mgr.; E. J. Perry, engr.; W. J. Beasley, pur. agt. Adv. Agcy.—Devereaux & Co., Inc., 10 Hopper st., Utica, N. Y.

ROSS, C. OWEN MFG. CO., 2710 S. Hill st., Los Angeles, Calif. Ross barbed roller bearings, for automobile springs, spring tools. C. Owen Ross, pres., vice-pres., gen. mgr.; Geraldine Hickam, secy.; Earl R. Culp, adv. mgr., E. F. Krause jr., engr. Adv. Agcy. — Heintz, Pickering & Co., Paramount bldg., Los Angeles, Calif.

ROSS GEAR AND TOOL CO., Eighth and Heath sts., Lafayette, Ind. Steering gears. David E. Ross, chmn.; E. Gruenwald, pres.; Roy M. Reser, secy., pur. agt.; Arthur F. Kanne, treas.; S. L. Bradley, sales mgr.; W. K. Creson, engr. Det. Rep.—H. A. Dick, General Motors bldg. Adv. Agcy.—Sidener & Van Riper, Inc., Indianapolis, Ind.

ROTARY ELECTRIC STEEL CO., Eight Mile and Mound rds., Detroit, Mich. Hot rolled and cold drawn carbon bars. Hot rolled and cold drawn alloy bars. Cold rolled strip. H. M. Naugle, chmn.; W. H. Colvin jr., pres., treas.; J. S. Andrews, vice-pres. in chge. of sales. N. D. Devlin, vice-pres. in chge. of operations. A. W. Taylor, pur. agt.

ROTARY LIFT CO., Memphis, Tenn., Auto, truck and bus lifts. E. E. Blevins, vice-pres.; O. E. Cathey, secy. Hugh Allan, sales mgr. adv. mgr. W. E. Rier, pur. agt. Adv. Agcy.—Perry-Brown, Inc., Cincinnati, O.

ROTOR TOOL CO., 17325 Euclid ave., Cleveland, O. Portable pneumatic tools, portable high cycle electric tools. H. P. Bailey, pres.; F. B. Engeln, secy.; L. D. McDonald, treas.; R. C. Manning, sales mgr.; J. Sturrock jr.; R. Bergold, pur. agt.; D. S. Linton, supt. Det. Rep.—Joseph Jacobson, 5928 Second blvd.

ROTTLER BORING BAR CO., Inc. 1122 W. Spokane st., Seattle, Wash. Boring bars, valve tools. C. T. Róttler, pres., gen. mgr.; H. L. Rottler, treas., T. Sampson, pur. agt. Adv. Agcy.—Daken Advertising Agency, Seattle, Wash.

ROWLAND, WILLIAM & HARVEY, Inc., Tacony & Lewis sts., Philadelphia, Pa. Automobile leaf springs.. Herbert C. Rowland, pres.; E. Trasel Rowland, vice-pres. secy.; Wm. H. Courtright, treas., sales mgr.; M. McDonald, pur. agt.

ROYAL BATTERY CORP., Jersey ave., New Brunswick, N. J. (New York address 175 5th ave.) Storage batteries. Lucien C. Brown, chmn.; Alfred Foster, pres.; C. A. Bolles, vice-pres.; Russell E. Watson, secy., Chester M. Foster, treas.; O. H. Bauer, engr.

RUBEROID CO., 500 Fifth ave., New York, N. Y. Saturated felts for automobile bodies, deadening felt. Herbert Abraham, pres.; W. B. Harris, vice-pres., secy.; L. C. Rugen, vice-pres. of mfg.; E. M. Railton, vice-pres.; S. Woodward, vice-pres.; E. M. Johnson, secy; R. G. McCoy, adv mgr.; W. B. Harris, pur. agt.; S. P. Moffet, vice-pres. Det. Rep. —R. M. Inglis, 13544 Stoepel ave. Adv. Agcy.—Wildrick & Miller, Inc., 630 Fifth ave., New York, N. Y.

RUBY CHEMICAL CO., Inc., 63-70 McDowell st., Columbus, O. Soldering flux (liquid), soldering paste, acid core solder, rosin core solder, stainless steel soldering flux. Lee Gorsuch, pres.; Ernest F. Hoover, vice-pres.; G. C. Baker, secy.-treas., gen. mgr. Adv. Agcy. — Harry M. Miller Advertising Agency, 22 E. Gay st., Columbus, O.

RUSSELL MFG. CO., East Main st., Middleton, Conn. Brake linings, woven

(Continued on Page 86)

Trends of Automobile Selling, Based on 1937 Survey

Figures from a survey by the National Automobile Dealers Assn.

	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific	U.S. Total
Number of dealers reporting	33	105	150	77	32	11	47	55	76	586
New cars sold at retail	7,311	25,462	33,144	16,965	9,802	3,218	11,350	8,993	23,380	139,625
Retail new cars sold—installments	3,658	14,940	19,114	9,100	5,100	2,219	6,923	5,336	13,456	79,846
Used cars sold at retail	11,620	39,512	51,121	32,562	15,195	6,328	20,449	16,720	36,573	230,080
Used cars sold—installments	5,684	23,460	30,395	18,434	9,026	4,894	13,258	10,659	22,567	138,377
Used cars junked	1,200	4,840	5,922	1,653	521	511	1,295	955	1,949	18,846
Used cars traded on new sales	6,745	20,634	27,590	15,291	8,120	2,694	9,263	7,384	19,419	117,140
Used cars traded on used sales	5,985	22,838	28,833	18,656	7,938	3,618	11,031	9,481	18,651	127,031
Total used cars taken in trade	12,730	43,472	56,423	33,947	16,058	6,312	20,294	16,865	38,070	244,171
Average new car sales per dealer	222	242	221	220	306	293	241	163	308	238
Average used car sales per dealer	352	376	341	423	475	575	435	304	481	393
Average used cars traded in per dealer	386	414	376	441	502	574	432	306	501	417
Per Cent Sold on Installment:										
New cars	50.03	58.67	57.67	53.64	52.03	68.95	60.99	59.34	57.55	57.19
Used cars	48.92	59.37	59.46	56.61	59.40	77.34	64.83	63.75	61.70	60.14
All cars	49.35	59.10	58.75	55.59	56.51	74.51	63.46	62.20	60.08	59.03
Per Cent of Trade-ins and Used Car Sales:										
Trade-ins on sales of new cars	92.26	81.04	83.24	90.13	82.84	83.72	81.61	82.11	83.06	83.90
Trade-ins on sales of used cars	51.51	57.80	56.40	57.29	52.24	57.17	53.94	56.70	50.99	55.21
Total trade-ins in per cent of new cars sold	174.12	170.73	170.24	200.10	163.82	196.15	178.80	187.53	162.83	174.88
Used cars sold in per cent of new cars sold	175.35	174.19	172.11	201.68	160.33	212.52	191.58	196.54	164.76	178.28
Used cars junked in per cent of total trade-ins	9.43	11.13	10.49	4.87	3.24	8.09	6.38	5.66	5.12	7.72
Inventories:										
New cars on hand Jan. 1, 1937	459	1,808	1,655	1,260	708	203	712	717	1,899	9,421
New cars on hand Dec. 31, 1937	910	3,249	4,150	2,369	1,570	343	1,539	1,141	3,669	18,940
Used cars on hand Jan. 1, 1937	1,480	5,109	6,430	4,182	1,458	485	2,223	1,961	4,474	27,802
Used cars on hand Dec. 31, 1937	1,359	4,796	6,728	4,089	1,612	606	2,135	2,055	4,107	27,487
Per cent change in new car inventory	+98.26	+79.70	+150.75	+88.01	+117.51	+68.96	+116.15	+59.13	+93.21	+101.04
Per cent change in used car inventory	— 8.18	— 6.13	+ 4.63	— 2.22	+ 10.56	+24.95	— 3.96	+ 4.84	— 8.21	— 1.13

New England—Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont. **Middle Atlantic**—New Jersey, New York, Pennsylvania. **East North Central**—Illinois, Indiana, Michigan, Ohio, Wisconsin. **West North Central**—Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. **South Atlantic**—Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia. **Pacific**—California, Oregon, Washington. **East South Central**—Alabama, Kentucky, Mississippi, Tennessee. **West South Central**—Arkansas, Louisiana, Oklahoma, Texas. **Mountain**—Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming.

Rubber Tire Shipments

(Figures estimated by the Rubber Manufacturers Assn., Inc.)

	Number of Units			
	1934	1935	1936	1937
High Pressure Casings	5,272,853	4,014,650	3,707,685	3,107,867
Balloon Casings	41,413,699	44,168,479	41,136,134	51,583,686
Solids and Cushions*	192,940	274,837	369,499	616,748
Inner Tubes	43,045,494	46,067,906	44,245,700	52,376,657

*Includes Industrial Truck, Tractor and Trailer Tires.

ESTABLISHED 27 YEARS

NATIONAL

Used Car Market Reports

BLUE BOOK--RED BOOK

The genuine, original **unadulterated** National Used Car Market Reports—for dealers, by dealers, and serving dealers successfully since the inception of the Used Car Trade-In Problem more than a quarter century ago. These Used Car Appraisal Guides have actually SAVED automobile dealers a great many millions of dollars—by reducing and eliminating their used car losses.

Endorsed and recommended by American Finance Conference, National Association of Sales Finance Companies, and State and Local Automobile Dealers Associations.

Blue Book and Red Book give all needed motor vehicle specifications, identification data, serial and motor numbers, original factory prices, bore and stroke, horsepower, wheelbase, and values in today's markets. Issued bi-monthly—thoroughly revised and each Edition always complete and right up-to-date.

"The Nation's Standard of Used Car Values"

National Used Car Market Report, Inc.

1315 South Michigan Avenue, Chicago

By yearly subscription: Red Book Cash Value Pocket Edition $7; Blue Book Retail Sales Pocket Edition $5; Both Pocket Editions $9.50; Blue Book Executives Edition $10; All 3 Editions $19.

General Motors Factory Sales to Dealers, '29-'37

(By Divisions)

Total sales to dealers, including Canadian sales and overseas shipments, by makes of cars, for the year ended Dec. 31, 1937, compared with the sales of preceding years, follow:

Passenger Cars:	1937	1936	1935	1934	1933	1932	1931	1930	1929
Buick†	232,648	184,387	109,724	82,155	44,758	47,664	95,354	127,687	199,414
Cadillac 8-12-16	11,795	12,613	8,901	5,531	3,491	5,667	9,484	13,025	15,416
LaSalle	32,941	16,278	14,095	6,182	3,348	3,586	5,775	9,729	21,498
Chevrolet	911,782	1,011,465	825,474	642,336	494,756	319,626	644,214	703,071	988,191
Oldsmobile*	217,789	191,221	188,581	83,965	37,164	22,724	49,840	51,918	105,337
Pontiac (Oakland)	239,353	183,813	178,083	82,155	88,363	48,926	91,604	92,507	224,448
Opel‡	104,129	98,700	89,926	63,068	35,812	18,002	22,207	6,424	.....
Vauxhall‡	28,078	21,320	26,240	18,817	11,106	3,427	3,381	1,258	.....
Commercial Cars:									
Chevrolet	277,997	265,735	238,506	225,092	130,000	77,534	137,247	160,356	344,963
Opel (Blitz)¶	24,241	21,697	12,839	8,597	3,483	2,912	4,148	1,021	.....
Vauxhall (Bedford)¶	31,668	29,384	22,431	21,639	16,530	12,902	11,455	7,119	.....
Others§	4,476	1,077	888	910	224	.....	.....	.....	.....
Totals:									
Passenger	1,778,515	1,719,797	1,441,024	984,209	718,798	469,622	921,859	1,005,619	1,554,304
Commercial	338,382	317,893	274,664	256,238	150,237	93,348	152,850	168,496	344,963
Grand Total	**2,116,897**	**2,037,690**	**1,715,688**	**1,240,447**	**869,035**	**562,970**	**1,074,709**	**1,174,115**	**1,899,267**

†Buick includes Marquette in 1929 and 1930.

*Oldsmobile includes Viking in 1929, 1930, and 1931.

‡Opel and Vauxhall cars manufactured by Opel since July 1, 1930, and by Vauxhall since Apr. 1, 1930, which were not included in published figures prior to these dates.

¶Opel (Blitz) and Vauxhall (Bedford) commercial cars manufactured by Opel since July 1, 1930, and by Vauxhall since Apr. 1, 1930, which were not included in published figures prior to these dates.

§Other includes G.M.C. trucks manufactured by General Motors of Canada, Ltd., and miscellaneous commercial cars assembled since April 10, 1937.

General Motors Sales of Cars and Trucks

(Table from GM Annual Report)

The following table shows total sales of General Motors cars to dealers, including Canadian sales and overseas shipments, sales to consumers in Continental United States.

	Total Sales to Dealers, including Canadian Sales and Overseas Shipments			Unit Sales in United States					
				Sales to Consumers			Sales to Dealers		
	1937	1936	1935	1937	1936	1935	1937	1936	1935
January	103,668	158,572	98,268	92,998	102,034	54,105	70,901	131,134	75,727
February	74,567	144,874	121,146	51,600	96,134	77,297	49,674	116,762	92,907
March	260,965	196,721	169,302	196,095	181,782	126,691	216,606	162,418	132,622
April	238,377	229,467	184,059	198,146	200,117	143,909	199,532	194,695	152,946
May	216,654	222,603	134,597	178,521	194,628	109,051	180,085	187,119	105,159
June	203,139	217,931	181,188	153,866	189,756	137,782	162,390	186,146	150,863
July	226,681	204,693	167,790	163,818	163,459	108,645	187,869	177,436	139,021
August	188,010	121,943	124,680	156,322	133,804	127,346	157,000	99,775	103,098
September	82,317	19,288	39,152	88,564	85,201	66,547	58,181	4,669	22,986
October	166,939	90,764	127,054	107,216	44,274	68,566	136,370	69,334	97,746
November	195,136	191,720	182,754	117,387	155,552	136,859	153,184	156,041	147,849
December	160,440	239,114	185,698	89,682	173,472	122,198	108,232	197,065	150,010
Total	2,116,897	2,037,690	1,715,688	1,594,215	1,720,213	1,278,996	1,680,024	1,682,594	1,370,934

Who's Who

(Continued from Page 83)

and fabric types; clutch facings, woven, wovenmolded and molded types. G. M. Williams, pres., gen. mgr.; C. J. Sherer, vice-pres.; T. M. Russell jr., vice-pres.; A. P. Smith, secy.; C. J. Sherer, treas.; C. E. Harwood, sales and adv. mgr.; G. T. Palmer, pur. agt.; L. H. Brainard, asst. S. M. **Dist. Rep.**—W. F. Heyd. F. Acker Thompson, 4-150 Gen. Motors bldg. **Adv. Agency.**—Hoyt's Service, Hartford, Conn.

RUSTLESS IRON AND STEEL CORP., 3400 East Chase st., Baltimore, Md. All grades of stainless steel in bars, wire and billets. C. E. Tuttle, chmn., pres.; T. F. McLaughlin, vice-pres.; J. K Remsen, secy.-treas.; W. B. Pierce, sales mgr.; Stanley P. Watkins, engr.; W. F. Marks, pur. agt. **Det. Rep.**—A. L. Grinnell, H. S. RuDesill, 4-137 General Motors bldg. **Adv. Agcy.**—Ketchum, MacLeod & Grove, Inc., Koppers bldg., Pittsburgh, Pa.

S

SAFETY VULCANIZER CO., Inc., 875 W. 120th st., Chicago, Ill. Combination retreading-recapping molds, sectional tire repair molds. Walter J. Jaratt, pres.; E. E. Graham, vice-pres.; I. E. Homolka, secy.-treas.

SAGINAW MALLEABLE IRON DIV., general Motors Corp., Saginaw, Mich. Malleable irom castings. W. H. Doerfner, gen. mgr.; French E. Bassett, sales mgr.; R. H. Mooney, engr.; A. J. Brisbois, pur. agt. J. H. Smith, works mgr.; C. R. Hubinger, compt.

SAGINAW PLATING & SPECIALTY CO., 2119 S. Jefferson ave., Saginaw, Mich. General plating on automobile parts, trailer bumpers, etc. R. E. Beuthin, pres.; E. C. Swift, sales mgr.. **Adv. Agcy.**—Seeman & Peters, Saginaw, Mich.

SAGINAW STAMPING & TOOL CO., 68 Williamson st., Saginaw, Mich. Overhead conveyor equipment, one, two, and three wheel trailers, trailer parts and accessories, casters, trucks, pneumatic wheels, Maxwell K. Pribil. C. L. McMillan, G. K. Mulholland, exec. board; Maxwell K. Pribil, sales mgr.; Ray Harroun, mgr.; C. L. McMillan, pur. agt., secy. **Det. Rep.**—Harold F. Cates, 454 Book Tower.

SAGINAW STEERING GEAR DIV., General Motors Corp., 628 Hamilton st., Saginaw, Mich. Steering gears, universal joint assemblies, steering connecting linkage, drag links. A. W. Phelps, gen. mgr.; W. A. Kull, chief eng., sales mgr.; W. H. Taylor, pur. agt.; O. W. Habel, fact. mgr.; C. F. Runchey, compt.; J. C. Helveston, chief inspector.

SALES CONTESTS, Inc., Talbott Realty bldg., Dayton, O. Merchandise prize contests. N. L. Cramer, Pres.; H. I. Cramer.

SALES OIL BURNER, Corp., 1810 N. Saginaw st., Flint, Mich. Commercial oil burners, trailer heaters, etc. E. W. Sales, pres., gen. mgr. F. W. Whitcomb, vice-pres.; E. Whitcomb, secy.; M. J. Sales, treas.; H. G. Sales, engr., asst secy.-treas. **Det. Rep.**—M. J. Sales, 1542 Eaton rd., Berkley, Mich.

SAMPSON TOOL CO., Inc., 101 Walker st., New York, N. Y. Latthe chucks, shapers, vises, hoists. H. J. Hagen, pres.; O. Cooper, secy.-treas. **Det. Rep.**—James W. George, 3131 E. Jefferson ave.

SAMSON-UNITED CORP., 1700 University ave., Rochester, N. Y. Rubber bladed auto fans, etc. A. O. Samuels, pres., gen. mgr.; H. L. Samuels, vice.-pres. sales mgr.; C. L. Martin, vice-pres.; C. J. McAbee, secy., asst. treas.; R. E. Weiss, adv. mgr.; P. Tchinnis, engr.; B. B. Goodman, pur. agt.; J. Schenberg, dir. of merch. **Adv. Agcy.**—Grey Advertising Agency, 128 W. 31st st., New York, N. Y.

SASGEN DERRICK CO., 3101 Grand ave., Chicago, Ill. Derricks, winches and tow derricks, M. J. Sasgen, pres., treas.; M. F. Sasgen, vice-pres.; T. A. Mayor, secy.

SAYERES & SCOVILL CO., Gest and Summer sts., Cincinnati, O. Hearses, ambulances. F. F. Scovill, pres.; M. H. Mills, vice-pres., treas.; C. G. Schott, secy.; E. E. Hess, gen. mgr.; C. A. Eisenhardt, sales mgr., adv. mgr.; W. C. Hess, chief engr.; Walter Lang, pur. agt.; H. M. Breuer, serv. mgr. **Adv. Agcy.**—Key Advertising Co., Fountain Square bldg., Cincinnati, O.

SAYLOR-BEAL MFG. CO., 1501 E. Philadelphia ave., Detroit, Mich. Air compressors, spray guns and painting equipment, tire pumps. F. F. Beal, pres., treas.; Chas. S. Fisher, vice-pres.; Rose Beal, secy.; R. Stahl, engr.; E. R. Saur, pur. agt. **Adv. Agcy.**—R. Marshall, 6553 Woodward ave.

SCHELM BROTHERS, Inc., 129 McKinley, East Peoria, Ill. Truck bodies, custombuilt commercial display and sales trailers, travel coaches. Carl W. Schelm, pres.; Paul F. Schelm, vice-pres.; W. H. Schelm jr., gen. mgr., pur. agt. **Adv. Agcy.**—Mace Advertising Agcy., Peoria, Ill.

SCHLEGEL MFG. CO., 277 N. Goodman st., Rochester, N. Y. Interior trimmings of all types. Charles P. Schlegel, pres., treas.; James F. Sproat, sales mgr., secy.; George C. Schlegel, pur. agt. **Det. Rep.**—Automotive Materials Corp., 2300 Fisher bldg.

SCHOELKOPF MFG. CO., 212 E. Washington ave., Madison, Wis. Door operators. L. F. Schoelkopf, pres.; Mae Olson, office, mgr.; John Thomas, shop foreman. **Adv. Agcy.**—Straus Printing Co., 214 E. Washington ave., Madison, Wis.

SCHRADER'S, A. Son, Div. Scoville Mfg. Co., 470 Vanderbilt ave., Brooklyn, N. Y. Tire valves and gauges, valve caps and cores, vulcanizers, etc. W. T. Hunter, vice-pres., gen. mgr.; R. L. de Brauwere, sales mgr.; D. S. Hunter, adv. mgr.; S. T. Williams, engr.; C. Wilcox, pur. agt.; F. Trismen, treas. **Det. Rep.** — P. C. Evans, 327 New Center bldg. **Adv. Agcy.**—E. M. Freystadt Assoc., 570 Lexington ave., New York, N. Y.

SCHROEDER & TREMAYNE, Inc., 500 N. Commercial st., St. Louis, Mo. Wholesalers and distributors of sponges, chamois, cellulose sponges and loofahs. Theodore Schroeder, pres.; J. A. Sheehan, vice-pres.; Carl Rueck, secy. **Det. Rep.**—F. H. Forrest, 2332 Tuxedo.

SCHULT TRAILERS, Inc., 1700 S. Main st., Elkhart, Ind. House trailers. Wilbur J. Schult, pres.; Sara Gail Schult, vice-pres.; Walter O. Wells, vice-pres., gen. mgr.; Maynard M. Wells, vice-pres., sales mgr.; W. J. Schult, secy.-treas.; Gerhard Schutes, engr.; G. T. McBride, pur. agt.; J. H. Burk, auditor. **Adv. Agcy.**—**McDonald, Cook**, Sherland bldg., South Bend, Ind.

SCHWARZE ELECTRIC CO., 1322 E. Church st., Adrian, Mich. Bells, industrial and automotive horns, inter-communicating systems, etc. W. H. Burnham, chmn.; Vernon Hoxie, pres.; A. J. Walper, vice-pres.; A. J. Meade, asst. secy.; H. M. Beery, gen. mgr., secy.-treas.; J. C. Scott, sales mgr., auto. div.; J. W. Murdock, sales mgr., elec. div.; L. J. Stern, engr.; A. J. Mead, pur. agt. **Det. Rep.**—J. L. Carey, Edison bldg., Dearborn, Mich.

SCHWITZER-CUMMINS CO., 1125 Massachusetts ave., Indianapolis, Ind. Stokers, super chargers, hardened and ground screw machine products, water pumps, oil pumps, governors, fans, etc. Louis Schwitzer, chmn., treas.; Louis Schwitzer jr. vice-pres., secy.; Walter Sormane, asst. sales mgr.; F. S. Robinson, adv. mgr.; H. E. Blassingham, pur. agt.; A. N. Phillips.

SCINTILLA MAGNETO CO., Inc. Sherman ave., Sidney, N. Y. Ignition for internal combustion engines, switches, radio shielding, shielding harness, spark plugs, battery ignition. Vincent Bendix, pres.; H. Hanni, vice-pres., gen. mgr.; T. Z. Fagen, vice-pres., sales mgr.; R. P. Lansing, vice-pres.; adv. mgr.; H. A. Gossner, secy.; E. B. Palmer, treas.; G. E. Steiner, Asst. secy.-treas.; W. J. Spengler, engr.; Alex. Bekker, pur. agt.; Geo. C. Fleener; G. C. Cottrell, asst. secy.; H. A. Westphal, asst. treas. **Det. Rep.**—Walter E. Lees, 8-205 General Motors bldg. **Adv. Agcy.**—Roche, Williams & Cunnyngham, 310 S. Michigan ave., Chicago, Ill.

SCOVILLE MFG. CO., 99 Mill st., Waterbury, Conn. Flashlights, automotive ash trays, seat cover pins, radiator grille, cover fasteners, copper automobile tubing. E. O. Goss, pres., gen. mgr.; J. H. Goss, vice-pres.; F. T. Reeves, secy.; L. P. Sperry, treas.; E. S. Sanderson, sales mgr.; A. M. Rogers, adv. mgr.; A. J. German.

SEALED POWER CORP., 500 Sanford st., Muskegon, Mich. Piston rings, pistons, piston pins, cylinder sleeves, piston expanders. C. E. Johnson, pres.; P. C. Johnson, C. P. Damm, vice-pres.; P. R. Beardsley, secy.-treas.; R. R. Beardsley, asst. secy.-treas.; L. G. Matthews, asst. treas.; N. A. Moore, gen. mgr.; W. O. Banta, sales mgr.; J. E. Norwood, adv. mgr.; J. H. Ballard, engr.; L. F. Iverson, pur. agt. **Det. Rep.**—Geo. Davies, 3-266 General Motors bldg. **Adv. Agcy.**—Roche, Williams & Cunnyngham, 310 S. Michigan ave., Chicago, Ill.

SEAMAN PAPER CO., 1333 E. Milwaukee ave., Detroit, Mich. Industrial materials for automobile, bus, trailer trade. D. R. Seaman, chmn.; C. W. Sherman, pres.; Clayton Seaman, vice-pres.; A. J. Dursch, gen. mgr.; J. B. Seaman, sales mgr.

SEISS MFG. CO., 3835 Seiss ave., Toledo, O. Electric and hand operated horns, gas tank caps. Geo. J. Seiss, pres., gen. mgr.; Leonard A. Seiss, vice-pres., engr.; August J. Seiss, adv. mgr., sales mgr.

SERVICE CASTER & TRUCK CO., 850 N. Brownswood ave., Albion, Mich. Industrial casters, hand trucks, tractor drawn trailers, skid jacks, hydraulic lift trucks, electric, hydraulic and hand lifters, etc. W. A. Brown, pres.; George R. Cooper, vice-pres.; W. C. Peak, gen. mgr., secy.-treas.; S. S. Raynor, E. C. Goodall, sales mgrs.; W. B. Lackey jr. adv. mgr.; W. Zeindler, engr.; B. D. Safreed, pur. agt. **Det. Rep.**—Manufacturers Sales Co., 2180 E. Grand blvd. **Adv. Agcy.**—Evans Associates, Inc., 225 N. Michigan ave., Chicago, Ill.

SERVICE SPRING CO., 701-735 St. Paul st., Indianapolis, Ind. Leaf springs, helper springs, spring parts. O. J. Strayer, pres.; gen. mgr.; A. H. Gueutal, vice-pres.; W. H. Bunker, secy.; A. W. Hendrickson, engr., pur. agt.

SEVERIN CO., 27 Ball st., Irvington, N. J. Commercial bodies. P. R. Severin, pres., pur. agt.; M. M. Bamberger, secy.-treas.

SHAFER BEARING CORP., 35 East Wacker dr., Chicago, Ill. Bearings and roller bearing units. M. J. Tennes, chmn.; V. W. Peterson, pres.; R. B. Hoover, vice-pres., gen. mgr.; M. J. Tennes jr., vice-pres., sales mgr.; E. H. Verrall, adv. mgr.; A. H. Williams, engr.; C. E. Hoover, pur. agt., secy.-treas. **Det. Rep.**—Industrial Equipment Co., 2842 W. Grand blvd. **Adv. Agcy.**—Edwin H. Verall, 333 N. Michigan ave., Chicago, Ill.

SHAKESPEARE PRODUCTS CO., 417 N. Pitcher st., Kalamazoo, Mich. Push and pull controls, spiral wire conduit tubing. Wm. Shakespeare jr., pres.; Henry G. Shakespeare, vice-pres., gen. mgr.; Monroe Shakespeare, secy.; Wm. J. Harrison, treas.; Donald E. Wallace, sales mgr.; Herman H. Weber, engr.; Harold Baron, pur. agt. **Det. Rep.**—Harry G. Wilson, 710 Stephenson bldg.

SHALER CO., Waupun, Wis. Vulcanizers motor gum solvent, penetrating oil, dry lubricant. Wm. Fleming jr., pres., gen. mgr. A. G. Gibbons, vice-pres., secy.; J. B. Angle, vice-pres.; E. J. Maitre, asst. treas.; A. E. Haese, asst. secy.; W. S. Coles, sales mgr.; A. H. Verner, adv. mgr.; H. Hanson, engr.; B. H. Bredeson, pur. agt. **Det. Rep.**—C. E. Sharp, **Adv. Agcy.**—Kirkgasser-Drew, Chicago, Ill.

SHAMROCK TRAILERS, 12321 Turner, Detroit, Mich. Utility trailers, axles and spring parts. Geo. B. Shamrock, pres.; J. Grant, gen. mgr.; **Adv. Agcy.**—Rolfe Spinning, Detroit, Mich.

SHARON STEEL CORP., S. Irvine ave., Sharon, Pa. Hot and cold rolled strip steel, sheets, alloy and stainless strip steel. H. A. Roemer, chmn., pres.; T. M. Galbreath, vice-pres.; sales mgr.; J. M. Hughes, G. A. Connors, D. B. Carson, vice-pres.; J. Reid Evans, secy.-treas.; B. E. Kibbee, exc. vice-pres.; E. E. Reagle, gen. mgr.; G. S. Warren sr., engr.; A. D. Troth, pur. agt.; D. B. Carson, vice-pres. in chge. stainless steel sales. **Det. Rep.**—Sharon Steel Corp., 11-241 General Motors bldg.

SHATTERPROOF GLASS CO., 4815 Cabot ave., Detroit, Mich. Safety glass. W. B. Chase, pres., treas.; P. J. Chase, vice-pres.; J. H. Immel, secy.; V. G. Brown, asst. secy.; M. S. Owen, J. E. Morrison, sales mgrs.; A. V. Whittington, pur. agt.

SHEFFIELD GAGE CORP. (Cimatool Co.), 1517-31 E. Third st., Dayton, O. All types of standard and speacial gages, chamfering and burnishing machines, precision boring machines, tools, dies, jigs, and fixtures. C. H. Reynolds (Sheffield), O. M. Poock (Cimatool), pres.; Louis Poock, vice-pres., gen. mgr. (both cos.); M. W. Davis (Sheffield), D. R. Laughter (Cimatool), sales mgrs.; O. A. Ahlers, adv. mgr. (both cos.); Albert Poock, W. F. Aller, engrs.; O. A. Ahlers, pur. agt. (both cos.).**Det. Rep.**—C. H. Reynolds, (both cos.), 401 Stormfeltz-Loveley bldg. **Adv. Agcy**—Witt & Burden (both cos), 5757 Cass ave., Detroit, Mich.

SHELLER MFG. CORP., Portland, Ind. Steering wheels, horn buttons, gearshift knobs. E. F. Cartwright, chmn., treas., M. M. Burgess, pres., gen mgr.; J. McKeown, secy., E. J. Cosgrave, sales mgr. G. A. McFarland, engr.; E. J. Minch, pur. agt.; Ted Collier, fact. mgr. **Det. Rep.**—E. J. Cosgrave, 2-128 General Motors bldg.

SHEPARD-THOMASON CO., 2023 W. Gage ave., Los Angeles, Calif. Brake lining and grinding machines, brake shoe gauges, portable brake shoe grinders, riveting machines, piston aligning equipment, valve-facing machines, bearing reamers, and wheel pullers. H. Thomason, pres., sales mgr.; A. M. Shepard, vice-pres., gen. mgr.; Miss M. Thomason, pur. agt., secy. **Adv. Agcy**—Houston Advertising Agency., 3312 Sunset blvd., Los Angeles, Calif.

SHERMAN-KLOVE CO., 3535 W. 47th st., Chicago, Ill. M. H. Sherman, chmn.; J. W. McDonough, pres.; W. J. McDonough, vice-pres.; W. S. Sherman, treas.; E. L.

(Continued on Next Page)

Insurance Rates

Workmen's Compensation

STATE	Auto or Aircraft Engine Mfg. Code 3805	Auto Garages or Repair Shops: Auto Mfg. or Assembling Code 3808	Auto Garages or Repair Shops: All Other Employes Code 8391	Automobile Salesmen Code8748	Clerical Office Employes Code 8810 (9)
Alabama	.99	1.52	1.31	.44	.07
Arizona	2.53	2.89	(1)3.58	(2)2.98	.10
California	1.41	2.17	(3)1.94	(4)1.22	1.22(4, 11)
Colorado	1.12	1.96	2.21	.80	.11
Connecticut	.80	1.70	2.31	.78	.10
Delaware	....	(7)1.05	(8) .85	(8) .85	.05(10)
Dist. of Col.	1.30	2.23	2.54	.71	.11
Florida	.87	1.53	1.59	.49	.08
Georgia	1.11	1.69	1.75	.52	.07
Idaho	1.30	2.23	2.48	.79	.09
Illinois	1.17	1.49	2.06	.65	.07
Indiana	.65	.70	1.79	.62	.07
Iowa	.90	1.57	2.09	.50	.07
Kansas	.82	1.46	1.67	.57	.07
Kentucky	.82	1.44	1.62	.58	.07
Louisiana	1.01	1.77	2.43	.69	.10
Maine	1.15	1.73	2.09	.75	.09
Maryland	1.05	1.81	2.28	.74	.13
Massachusetts	1.21	3.71	2.08	.43	.07
Michigan	1.26	.84	1.74	.71	.07
Minnesota	1.34	1.99	2.93	.98	.08
Missouri	1.41	2.11	2.30	.80	.07
Montana	1.67	2.94	2.81	.91	.09
Nebraska	1.26	2.26	2.49	.84	.08
New Hampshire	.86	1.53	1.78	.51	.06
New Jersey	1.40	2.45	2.40	.66	.09
New York	1.90	2.78	4.00	1.11	.10
North Carolina	.90	1.67	1.90	.74	.07
Oklahoma	1.73	3.06	2.29	.66	.08
Oregon	2.48	2.60	3.59	.61	.09
Pennsylvania	.....	(7)2.00	(8)2.20	(8)2.20	(10) .13
Rhode Island	.99	1.74	1.97	.51	.09
South Carolina	1.14	1.74	1.96	.90	.09
South Dakota	.86	1.45	1.98	.53	.09
Tennessee	.78	1.34	1.42	.46	.07
Texas	1.83	8.20	(5)1.99	(6)1.99	(11)1.99
Utah	1.95	2.90	2.99	1.05	.13
Vermont	.67	1.18	1.35	.40	.07
Virginia	.89	1.54	1.73	.54	.06
Washington	1.77	1.89	2.56	.44	.07
Wisconsin	1.28	2.07	2.28	.97	.10

(1)—Code 8391 not applicable; rate for code 8386—Auto, garages or repair shops—All other employes including chauffeurs and automobile salesmen, used. Note: Clerical office not included.

(2)—Code 8748 not applicable; rate for code 7382—Auto, salesmen and service agencies—including chauffeurs and automobile salesmen, used. Note: Clerical office not included.

(3)—Code 8391 not applicable; rate for code 8389—Auto, garage, with or without repair shops, used.

(4)—Code 8748 not applicable; rate for code 8380 automobile dealers—new or used cars—(all employes), is used. (Note: Salesmen's payroll is limited to maximum of $2,000). (Clerical office employes included).

(5)—Same as (1) but clerical office included.

(6)—Code 8748 not applicable—rate for code 8380—Auto, sales and service agencies—with or without garage—all employes including chauffeurs, their helpers, office employes and salesmen.

(7)—Code number in Pennsylvania and Delaware is 463.

(8)—Most similar classification to code 8391 in Pennsylvania and Delaware is code 815—Garages and auto dealers including accessory service stations; all employes except office.

(9)—The operations included under codes 8391 and 8748 do not include those performed by clerical employes. This applies to the Pennsylvania and Delaware corresponding codes 463 and 815. Such employes are separately rated under code 8810 except in the state of Texas. California includes clerical employes in code 8380.

(10)—Code number in Pennsylvania and Delaware is 953.

(11)—This is rate for 8380 as any clerical office employes are included in 8380 and are not separately rated.

Why Not
Peace of Mind Insurance?

Clients
of
Detroit Insurance Agency
Enjoy This Protection
Underwriters of all Branches of Insurance

FISHER BUILDING
DETROIT
Trinity - 2-3300

G. W. CARTER
President

H. L. NEWNAN
Vice-President

L. J. LEPPER
Secretary-Treasurer

Who's Who

(Continued from Previous Page)

McDonough, sales mgr., secy.; T. O. Rueb, engr. Det. Rep.—Sidney Norwood, General Motors bldg.

SHERWIN-WILLIAMS CO., 101 Prospect ave., N. W., Cleveland, O. Paints, varnishes, lacquers, enamels, stains, dyes, chemicals, colors, lead products, pigments, disinfectants, insecticides, fungicides. George A. Martin, chmn., pres.; H. D. Whittlesey, first vice-pres.; A. W. Steudel, vice-pres., gen. mgr.; N. E. Van Stone, H. J. Hain, vice-pres.; T. G. Murphey, secy.; L. H. Schroeder, treas. K. H. Wood, dir. sales and dist.; C. M. Lemperly, gen. mgr. publ.; F. E. Davis, pur. agt. Det. Rep. — Sherwin-Williams Co., 1960 Milwaukee ave., E. Adv. Agcy. —T. J. Maloney, Inc., 381 Fourth ave., New York, N. Y.

SHULER AXLE CO., Inc., 2nd and Iowa sts., Louisville, Ky. Axles of all types, brakes, forgings, machined parts. J. P. Potter, pres.; H. C. McCaslin, engr.; L. J. Haming, pur. agt.; O. G. Byrn, treas. Det. Rep.—H. A. Dick, 8-155 General Motors bldg. Adv. Agcy.—Elmer H. Doe Advertising Agcy., Martin Brown bldg., Louisville, Ky.

SHUR GLOSS MFG. CO., 3555 W. Grand ave., Chicago, Ill. Oils, hydraulic brake fluid, etc.

SIGNAL MFG. CO., Inc., 587 Washingtton st., Lynn, Mass. Windshield defrosters, fender flaps, fans, license plate frames, suction cups, windshield wiper blades, aerials, Louis Zaiger, pres., treas.

SIMMONS MFG. CO., Ashland, O. Replacement parts for Ford and Chevrolet, hydraulic jacks, carburetors, mufflers and tail pipes. E. D. Rogers, chmn.; C. F. Groth, pres.; Gordon Groth, vice-pres., sales mgr.; H. E. Lemmerman, secy.-treas.; F. J. Blake, adv mgr. Det. Rep.—W. F. Beckley, 17302 Pennington dr. Adv. Agcy.—Morgan Advertising Co., Mansfield, O.

SIMONS PAINT SPRAY BRUSH CO., 17 Maryland ave., Dayton, O. Spraying equipment, air pressure regulator valves, portable air compressors, air hose with couplings, traffic line marking machines. George W. Simons, owner.

SIMONIZ CO., 2100 Indiana ave., Chicago, Ill. Simoniz, kleener, lacker rubb, chrome cleaner, upholstery cleaner, etc. Elmer Rich, pres.; H. L. Nehrbass, vice-pres.; S. C. Corboy, secy.; J. E. Rich, treas.; E. G. Hickey, sales mgr.; B. M. Schutz, pur. agt. Adv. Agcy.—George H. Hartman Co., 307 S. Michigan ave., Chicago, Ill.

SIMPLEX PRODUCTS CORP., 3830 Kelly ave., Cleveland, O. Piston rings, piston expanders. Dean M. Solenberger, pres.; Fred G. Ferguson, vice-pres., treas.; W. J. Phillips, sales mgr., adv. mgr.; R. C. Thompson, engr.; D. Schappi, pur. agt.; D. A. Morgan, cred. mgr.; H. T. Scoville, ast. sales mgr.

SIMPLICITY MFG. CO., Spring st., Port Washington, Wis. Cylinder reboring and grinding machines, fly cutter boring bar, piston turning and grinding machine, piston corrector, rebabbitting and reboring equipment, valve seat grinder, main and camshaft line boring machines, main bearing rebabbitting jigs, crank pin returning tools, model B valve face grinder. W. J. Neiderkorn, pres., gen. mgr.; Eric Wm. Passmore, secy.-treas.; J. W. Martin, adv. mgr.; F. V. Donald, engr.; L. A. Laubenstein, pur. agt. Det. Rep.—E. J. Ekstrom, 14080 Kentucky. Adv. Agcy.—Advertisers Service, Inc., 229 E. Wisconsin ave., Milwaukee, Wis.

SINKO TOOL MFG. CO., 351 N. Crawford ave., Chicago, Ill. Cigar lighters, exhaust extensions, gear-shift balls, tools and dies, injection moulding. J. A. Sinko, pres.; D. Szantav, secy.-treas.; P. P. Perrolot, sales mgr. adv. mgr: Wm. Drake, engr.; Paul Kaiser, pur. agt. Det. Rep.—Paul W. Seiler, 6520 Cass ave.

SKF INDUSTRIES, Inc., Front st. and Erie ave., Philadelphia, Pa. Ball and roller bearings, transmission appliances. W. L. Batt, pres.; R. F. Runge, vice-pres.; T. W. Dinlocker, secy.-treas.; R. H. DeMott, sales mgr.; R. C. Byler, adv. mgr.; G. Palmgren, chief engr.; H. J. Lance, pur. agt. Det. Rep.—C. R. Mabley, 2820 E. Grand blvd.

SKINNER PURIFIERS, Inc., 2231 Dalzelle st., Detroit, Mich. Engine super filters, oil purifying equipment, super filters for controlling lubricating conditions on diesel engines. Paul Williams, gen. mgr.; J. H. Skinner, sales mgr.; Wm. Blom, asst. treas.

SLEETER CO., Inc., 425 Fourth ave., New York, N. Y. Defroster blades, defrosters, windshield wipers. D. C. Abdelnour, pres., pur. agt., gen. mgr.; M. E. Hadad, vice-pres., secy.-treas; W. O. McGuigan, sales mgr.; Richard Picard, adv. mgr. Det. Rep. — Robert Staples Co. Adv. Agcy.—Picard Adv. Agcy., New York., N. Y.

SMITH, A. O. CORP., Milwapkee, Wis. Automobile frames, pressure vessels, line pipe, high yield casing, glass-lined tanks. L. R. Smith, chmn.; W. C. Heath, pres.; R. F. Bell, 1st vice-pres.; C. C. Joys jr., vice-pres. chge. of sales; R. Furrer, vice-pres. cge. of engr.; J. M. Floyd, vice-pres. chge. of mfg.; J. J. Stamm, secy.-treas.; J. Dilot, adv. mgr.; Don Sherman, chief engr., auto. prod.; W. J. Froderman, pur. agt.; J. P. Kelley, sales mgr, auto. prod.; B. F. Bart, sales mgr., gas and oil; E. P. Strothman, sales mgr., ceramic. Det. Rep.—A. O. Smith Corp., 4-129 General Motors bldg. Adv. Agcy.—Henri, Hurst & McDonald, Inc., 520 N. Michigan ave., Chicago, Ill.

SMITH, E. M. CO., 639 S. Clarence st., Los Angeles, Calif. Radiator hose, fan belts, brake lining. E. M. Smith, pres.; W. G. L. Smith, vice pres.; L. M. Hersperger, secy.; J. G. Brown, sales mgr. Adv. Agcy. — Houston Advertising Service, 3312 Sunset blvd., Los Angeles, Calif.

SMITH HERB EQUIPMENT CORP., 426 Taylor bldg., Rochester, N. Y. Hydraulic jacks and trestles, car washers, air compressors, special tools. Herb Smith, pres.; S. M. Smith, vice-pres.; C. H. Johnson, secy.; Earl F. Green, engr. Det. Rep.—William F. Beckley, 17302 Pennington drive.

SMITH, F. A. MFG. CO., Inc., N. Union at Augusta, Rochester, N. Y. Fans, hydraulic stop light switches, pilot blowers and pilot motors, ventilators. H. P. Toppin, chmn., pres.; H. M. Sylvester, secy.-treas. G. E. Sundre, sales mgr.; H. M. Mudge, adv. mgr.; E. Rusk, engr.; R. Reilich, pur. agt. Det. Rep. — E. W. Griffith, 740 Hazelwood ave.

SMITH, F. P. WIRE & IRON WORKS, Inc., Clybourn, Fullerton, Ashland and Medill aves., Chicago, Ill. Crimped wire guards and folding gates for motor trucks. Franklin P. Smith, pres.; Edward McClure, vice-pres.; Keith H. Thorp, secy.; Robert R. Barnitt, treas.; Durand Smith, adv. mgr.; Walter McClure, pur. agt.

SMOOTH-ON MFG. CO., 572 Communipaw ave., Jersey City, N. J. Iron cements, corrungated iron gaskets, pipe clamps. Vreeland Tompkins, pres., gen. mgr.; Harold D. Tompkins, treas. Adv. Agcy.—A. Eugene Michel & Staff, 132 W. 31st st., New York, N. Y.

S. & M. LAMP CO., 119 West 36th place, Los Angeles, Calif. All types of lights for cars and trucks, reflectors, etc. Jim Shirreffs, pres., gen. mgr.; W. G. Shirreffs, vice-pres., engr.; Sadie Friedman, treas.; L. E. Keford, sales mgr., adv. mgr.; Bud Jellison, pur. agt., secy. Det. Rep.—Ray Smith, 10122 Aurora ave.

SNAP-ON TOOLS CORP., Kenosha, Wis. Wrenches and hand tools for service mechanics, production-type wrenches for industry, etc. E. Wm. Myers, pres.; Joseph Johnson, vice-pres., treas.; Rogers Palmer, vice-pres.; Wm. A. Seidemann, secy.; W. C. Nemitz, asst, treas.; Rogers Palmer, sales mgr.; Geo. A. Smith, adv. mgr.; Geo. Walraven, engr.; F. A. Tetzlaff, pur. agt. Det. Rep.—A. M. Crandall, W. J. Sharbach, 93 Piquette st. Adv. Agcy.—Scott Telander, Milwaukee, Wis.

SOCIETE ANONYME CHRYSLER, 2 Rue de Riga, Antwerp, Belgium. Chrysler, Plymouth, De Soto and Dodge passenger cars, Dodge and Plymouth commercial cars, Dodge and Fargo trucks. S. I. Carlson, pres. and mang. dir.; S. G. Keevill, treas.; H. B. Hindley, aud. Adv. Agcy.—Erwin Wasey & Co., The Hague, Holland.

SOCONY-VACUUM OIL CO., Inc., 26 Broadway, New York, N. Y. Oils, gasoline, cylinder oils, paint products and specialties, etc. J. A. Brown, chmn. of exec. comm. and pres.; C. E. Arnott, E. R. Brown, A. F. Corwin, vice-pres.; W. D. Bickham, secy.; A. T. Roberts, treas.; F. S. Fales, H. F. Sheets, vice pres.; W. L. Faust, mgr. Eastern Div.; Eben Griffiths, adv. mgr.; A. E. Esser, engr.; J. R. Taylor, pur. agt.; G. V. Holton, vice-pres., gen. counsel; R. S. Durkee, compt. Det. Rep.—H. A. Coffin, 903 West Grand blvd. Adv. Agcy.—J. Stirling Getchell, New Center bldg., Detroit, Mich.

SOMMER & MACA GLASS MACHY. CORP., 3600 S. Oakley ave., Chicago, Ill. Plate and sheet glass working machinery, auto glass edgers, replacement tools and all accessories. Kurt Sommer, pres.; Paul Maca, vice-pres., treas.; Edw. Edwards, sales mgr., secy.

SORENSEN P. MFG. CO., Inc., 21-07 41st ave., Long Island City, N. Y. Replacement ignition parts, ignition coils, contact points, ignition condensers, starter switches generator cutouts, voltage regulators, generators and starter brushes, battery cables, ignition wire testing equipment. Peter Sorensen, pres.; Anna Sorensen, vice-pres.; Harry C. Sorensen, gen. mgr., secy. Det. Rep.—R. F. Hewitt, 3283 Northwestern ave.

SOSS MFG. CO., Roselle, N. J. Door hinges of all types. Joseph Soss, pres.; Charles J. Soss, treas., pur. agt.; Henry Soss, works mgr.; Samuel Soss, sales mgr., secy.; Stanley R. Nowelsky, engr. Det. Rep.—Andrew Ten Evck, 105 Scotten ave. Adv. Agcy.—G. P. Blackiston, 55 W. 42nd st., New York, N. Y.

SOUTHERN TRAILER CO., Jefferson Highway, Baton Rouge, La. Commercial coach trailers. D. Crefaci, pres.; W. S. Toliver, gen. mgr.; E. J. Toliver, adv. mgr.; W. S. Toliver, pur. agt.

SOUTHPORT PAINT CO., Inc., P. O. Box 280, Savannah, Ga. Auto top seal, welt seal, roof repair materials, paints. T. M. Walsh, gen. mgr.; R. R. Hampton, sales mgr.; L. H. Thesmar, adv. mgr.; L. C. Haskell, R. L. Clancy, vice-pres.; B. J. Sams, engr.; L. A. Snedeker, pur. agt.; F. L. Uebele, supt. Det. Rep. — H. J. Copeland, 7451 W. Eight Mile rd. Adv. Agcy.—Southeastern Adv. Agency, Savannah, Ga.

SOUTH SIDE BODY CO., Inc., 109-115 W. Morris st., Indianapolis, Ind. Custom built semi-trailer and truck bodies, tourist trailers, repairing of all truck and refrigerated bodies. Chas. A. Huffman, pres., engr.; W. N. South, treas.; R. J. Clark, pur. agt.

SPARKS-WITHINGTON CO., Jackson, Mich. Automobile horns, radios, refrigerators. W. Withington, chmn.; Wm. Sparks, pres.; W. J. Corbett, C. M. Sparks, vice-pres.; H. G. Sparks, vice-pres., gen. mgr.; David L. Johnson, secy.; Harold M. Johnson, vice-pres., treas.; Harley Wall, sales mgr., radio and refrigeration; Walter MacPhail, sales mgr., horns.

SPARTON TRAILER COACHES, Kent City, Mich. Trailer coaches. H. M. Smith, gen. mgr., pur. agt.

SPAULDING FIBRE CO., Inc., 310 Wheeler st., Tonawanda, N. Y. Hard vulcanized fibre in sheets, rods, tubes and fabricated machine parts, insulation. R. H. Spaulding, pres.; H. N. Spaulding, treas.; C. C. Steck, gen. mgr.; R. B. Green, adv. mgr; H. C. Steadman, engr.; A. P. Hardieben, pur. agt.; E. A. Russell, asst. gen. mgr. Det. Rep. — C. M. Metelski, mgr., 1010 Beaubien st.

SPECIALTY AUTO FABRIC CORP., 229 W. 58 st., New York, N. Y. Upholstering cloth, body hardware, reconditioning equipment. John. J. Greeley, chmn., pres.; Wm. A. Greeley, treas.

SPEER CARBON CO., St. Marys, Pa. Carbon, metal and metal-graphite brushes for generators, starters, motors, resistors and ignition suppressors for auto radio sets, welding carbons, spectrographic electrodes, carbon seal rings for diesel scavenger blowers, super-chargers and water pumps, silver-graphite contacts. William Kaul, pres.; William E. Hall, vice-pres.; Dudley H. Miller, gen. mgr., secy.-treas.; J. B. Mosser, sales mgr.; H. W. Abbott, adv. mgr.; J. C. Lion, mech. engr.; J. O. Bennett, pur. agt.; A. S. Bemis, gen. supt. Det. Rep.—A. V. Porter, 16912 Pinehurst st. Adv. Agcy.—O. S. Tyson and Co., 230 Park ave., New York, N. Y.

SPICER MFG. CORP., 4100 Bennett rd., Toledo, O. Needle bearing universal joints, generator drives, heavy duty transmissions, axles, clutches, controls, power take offs. C. A. Dana, pres.; R. E. Carpenter, vice-pres., gen. mgr.; Wm. Fairhurst, vice-pres., sales mgr.; E. C. Mogford, vice-press. in chge. mfg.; J. E. Padgett, vice-pres. in chge. engr.; J. V. Melick, secy.-treas.; R. V. Hessler, adv. mgr.; C. D. Peterson, engr.; E. C. Sudhoff, pur. agt. Adv. Agcy.—Meldrum & Fewsmith, Inc., Toledo, O.

SPONGE-AIRE SEAT CO., Inc., 1433-35 Main st., Buffalo, N. Y. Seat and back cushions for trucks, buses, tractors etc., sponge rubber arm rests. E. F. Becker, pres.; Henry W. Wekerle, secy.; Geo. J. Weckerle, treas.; C. H. Kent, sales mgr., adv. mgr., pur agt.; H. I. Doremus, engr. Adv. Agcy.—Baldwin & Strachan, Buffalo, N. Y.

SPRAKER MFG. CO., Inc., 1440 East 19th st., Indianapolis, Ind. Mechanics hand tools, valve grinders, valve seat reamers, valve lifters, pullers and bushing removers, cylinder head pullers, valve guide hole cleaners, door handle escutcheon plate compressors, head and tail lamp lens removers, bulb pliers. W. R. Poland, pres., gen. mgr.; L. C. Poland, vice-pres.; D. L. Spraker, secy-treas.

SPRINGFIELD MFG. CO., Bechtle and Columbia sts., Springfield, O. Fly wheel starter gears. M. F. Metz, pres.; Wm. P. Metz jr., vice-pres., gen. mgr.; Wm. P. Metz sr., secy.-treas.; E. L. Recnagle, engr.

(See display advertising index)

STANDARD AUTOMOTIVE PARTS CO., Muskegon, Mich. Valve stem guides, valve tappet guides, cam shaft thrust plates, keys, woodruff, gib head, feather and special. E. G. Carter, pres.; C. O. Mielke, vice-pres.; C. A. Nelson, secy.; E. T. Girdler, treas.; C. E. Burlingame, sales mgr., key dept. Det. Rep—Geo. E. Quigley, Inc., 7-137 General Motors bldg.

STANDARD BRASS WORKS, 1810-1832 W. St. Paul ave., Milwaukee, Wis. Roy M. Jacobs, pres., gen. mgr.; Adolf H. Schott, vice-pres.; Burleigh E. Jacobs, secy.

STANDARD ELECTRIC CO., Inc., 115 San Pedro ave., San Antonio, Tex. Storage batteries. Benj. Dubinski, pres., engr.; Leo Dubinski, gen. mgr., sales mgr. Adv. Agcy.—Pitluk Adv. Co., San Antonio, Tex.

STANDARD MOTOR PRODUCTS, Inc. 37-18 Northern blvd., Long Island City, N. Y. Ignition parts, ignition coils, starter and generator brushes, electrical cutouts, battery cables, cable and wire, switches. E. Fife, pres., gen. mgr.; H. O Rosenstein, sales mgr., adv. mgr., secy.; E. Kameny, engr., I. Beck, pur. agt.; J. F. Kenny, sales super. Adv. Agcy. — Walter Scott, New York, N. Y.

STANDARD OIL CO. (Indiana), 910 S. Michigan ave., Chicago, Ill. Fuels, lubricating oils, greases. E. G. Seubert, pres.; C. J. Barkdull, exec. vice-pres.; Allan Jackson, R. H. McElroy, M. G. Paulus, E. J. Bullock, A. W. Peake, vice-pres.; F. T. Graham, secy.; C. J. Barkdull, treas.; Amos Ball, sales mgr.; W. I. Nunn, adv. mgr., engr.; J. F. Hewson, pur. agt. Det. Rep.—P. A. Raupagh, 1011 4th st. Adv. Agcy. — McCann-Erickson, Inc., 910 S. Michigan ave., Chicago, Ill.

STANDARD SANITARY MFG. CO., (Div. of American Radiator and Standard Sanitary Corp.), Pittsburgh, Pa. Plumbing fixtures for factories, etc. Theodore Aherns, chmn., Henry M. Reed, pres.; Theodore E. Muller, 1st. vice-pres., gen. mgr.; Edward L. Dawes, 2nd. vice-pres.; William C. McKinney, secy.-treas.; Frank S. Kaulback, vice-pres., gen. mg. of branches; John J. Hall, vice-pres., gen. sales mgr.; Archibald M. Maddock, vice-pres., sales, eastern div.; Harry F. Beglen, vice-pres., sales, cent. div.; Franklin A. Kales, vice-pres., sales, west. div. Det. Rep.—Standard Sanitary Mfg. Co., 14430 Dexter blvd. Adv. Agcy.—Blaker Advertising Agency, Inc., 120 E. 41st st., New York, N. Y

STANDARD STEEL SPECIALTY CO., W. Mayfield st., Beaver Falls, Pa. Machine and axle keys, taper pins. E. J. Wagner, pres., gen. mgr.; J. B. Jamison, vice-pres., sales mgr.; Wm. P. Hood, secy.-treas. Det. Rep.—A. T. Thompson, 3105 E. Grand blvd.

STANDARD STEEL SPRING CO., 843 Fourth ave., Coraopolis, Pa. Bumpers and leaf springs, tractor and truck springs, etc. W. F. Brockwell, chmn.; R. C. Enos, pres.; H. E. Figgie, D. T. Gleason, vice-pres.; W. C. Eissler, secy.; W. F. Hueston, treas. Det. Rep.—H. E. Figgie, 12-254 General Motors bldg.

STANDARD TUBE CO., 14534 Woodward ave., Detroit, Mich. Welded, butted and seamless tubing, tubular products. Geo.

(Continued on Next Page)

CAMBRIDGE EXHAUST GAS TESTERS

bring you more satisfied customers

An exhaust gas tester enables you to handle more motor tune-up jobs, involving carburetor adjustment, in a given time and with better satisfaction to your customers. But this is a job for a precise *instrument*—not a *gadget*. The Cambridge Exhaust Gas Tester is made by manufacturers of fine precision instruments. Besides precision, it has the ruggedness and durability of a practical shop tool.

On the Model M instrument the patented Cambridge method of cushioning the moving system of the galvanometer with a magnetic field, protects this vital part against shock and vibration, enabling the instrument to be used on the road as readily as in the shop.

Cambridge Exhaust Gas Tester, Model M

Other Cambridge-built models suited for service garages are marketed by United Motors Service, Inc.

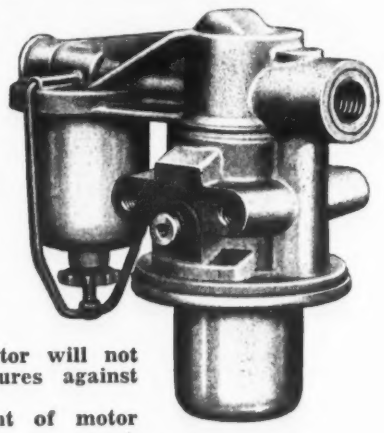
Send for Booklet No. 144-E

CAMBRIDGE INSTRUMENT CO INC

3732 Grand Central Terminal
NEW YORK, N. Y.

Pioneer Manufacturers of Precision Instruments

New K. S. Electric FUEL PUMP



Delivery is not affected by high temperature.

Delivery of 42 gallons per hour—free flow.

Delivery in excess of 20 gallons per hour in average installation, with 30" lift, 10 feet of ¼" I. D. tubing and 0.1175 Carburetor jet.

Will maintain constant level in carburetor float bowl.

Pressure at carburetor will not exceed 2½ lbs. — insures against flooding carburetor.

Delivery independent of motor speed.

A pusher type pump—mounted at the gas tank.

Quiet operation.

KING-SEELEY CORPORATION

TELEGAGE

ANN ARBOR MICHIGAN

LAIDLAW

CLOSED CAR UPHOLSTERIES

are recognized as the best values in their respective price classes

"Laidlaw Burbank" Top Covering
Seat Cover Cloths

THE LAIDLAW CO., INC.

Sales and Executive Office
16 West 60th Street - New York, N. Y.

Mills: Monson, Mass. and Philadelphia, Pa.

Yards of Satisfaction

SINCE 1905

Who's Who

(Continued from Previous Page)

B. Storer, pres.; Frank H. Landwehr, vice-pres.; H. G. Wall, secy.; Geo. B. Storer, treas.; M. H. Cosgrove, asst. secy.-treas.; V. O. Johnstone, sales mgr., adv. mgr.; H. H. Goddard, pur. agt.; Frank H. Schuman, works mgr.

STANLEY, JOHN T. CO., Inc., 626-662 W. 30th st., New York, N. Y. Automobile soaps, polishes, dressings, paints, cements and radiator products, shock fluids, brake fluids and lubricants. A. T. Stanley, pres., treas.; John W. Stanley, vice-pres.; N. S. Dahl, gen. mgr.; A. E. Keough, sales mgr.; Howard S. Cook, adv. mgr.; J. Everett, engr.; B. J. Adams, pr. agt. **Det. Rep.**—James M. Joyce, 242 Dennick ave., Youngstown, O.

STANLEY TOOLS, Automotive div., New Britain, Conn. Mechanics hand tools. G. H. Story, sales mgr.; G. M. Fletcher, adv. mgr.; D. L. Bartlett, pur. agt.; F. Schadt. **Det. Rep.**—Fred McFawn, 2832 E. Grand blvd., Machinery bldg.

STANT MFG. CO., 1620 Columbia ave., Connersville, Ind. Die cast hardware, castings, radiator and gasoline tank caps, locking gas tank caps. I. H. Stant, pres.; K. E. Stant, secy.-treas.; C. M. Hyde, sales mgr.; Eugene Roth, engr.; G. S. Scott, pur. agt. **Det. Rep.**—W. C. Berry, 742 New Center bldg.

STAR MACHINE & TOOL CO., 201 6th st., S. E., Minneapolis, Minn. Brake relining machines, automatic riveting machines, brake lining appliers. A. O. Wisti, pres.; Lowry Frestedt, engr. **Adv. Agcy.**—Mitchell Adv. Agency, Minneapolis, Minn.

STAR OVERALL & UNIFORM MFG. CORP., 61-69 Varick ave., Brooklyn, N. Y. Shop suits, etc. for industrial and service organizations. Sol. Gruder, pres., gen. mgr.; Max Gruder, vice-pres.; J. M. Brod, sales mgr.; J. Slone, adv. mgr.; Ernest Johnson, engr.; Miss S. Gleicher, pur. agt. **Adv. Agcy.**—Bromberg Advertising Agency, 90 Livingstone st., Brooklyn, N. Y.

STARRETT, L. S. CO., Crescent st., Athol, Mass. Precision tools, micrometers, cylinder gages, thickness gages, dial indicators, steel tapes, hacksaw frames and blades. F. A. Ball, pres.; D. Findlay, vice-pres., sales mgr.; A. H. Starrett, vice-pres.; W. G. Nims, treas.; H. E. Masters, adv. mgr.; A. H. Starrett, engr.; E. E. Warner, pur. agt. **Det. Rep.**—W. R. Barlow, 17153 Indiana ave. **Adv. Agcy.**—W. B. Snow & Staff, Statler bldg., Boston, Mass.

ST. CLAIR RUBBER CO., 440 E. Jefferson ave., Detroit, Mich. Rubber cements, rubber cloth. C. S. Scherer, pres.; M. S. Livingstone, D. S. Higbie, vice-pres.; H. G. Higbie, secy.; S. R. Livingstone, treas.; C. A. Pfeffer, gen. mgr.; R. M. McGuire, sales mgr.; R. H. Dexter, Marysville, Mich., pur. agt. G. H. Wheatley, fact. mgr.

STEELCOTE MFG. CO., 3418 Gratiot st., St. Louis, Mo. Paints, varnishes, enamels, putty, roofings, caulk, lacquers, etc. Geo. E. Niedt, chmn., gen. mgr.; Anthony E. Niedt, vice-pres., sales mgr.; Chas. J. Lippert, secy.; Geo. E. Niedt, treas., pur. agt. **Det. Rep.**—H. N. Link, 2147 Gratiot. **Adv. Agcy.**—Nash Adv. Agcy., Mart bldg., St. Louis, Mo.

STEEL & TUBES, Inc., 224 E. 131st st., Cleveland, O. Fabricated tubular automotive parts, mechanical, pressure and rail steel tubing, stainless steel tubing, electric metallic tubing and rigid conduit, small steel stampings. R. J. Wysor, pres.; L. W. Harston, vice-pres. in chge. of sales; Henry Wick, vice-pres., in chge. of oper.; Geo. F. White, treas.; Irving Whitehouse, adv. mgr.; F. M. Darner, engr.; L. A. Dimon, pur. agt. **Det. Rep.**—O. L. Miller, dist. mgr., 965 Wanda ave., Ferndale, Mich. **Adv. Agcy.**—G. M. Basford, Inc., Leader bldg., Cleveland, O.

STEELCRAFT PISTON RING CO., 1017 Franklin st., Detroit, Mich. Piston rings, enlarging machines, piston skirt expanders. James J. Carroll, pres.; Martin F. Carroll, vice-pres.; L. J. Resseguie, secy.-treas. **Det. Rep.**—Wayne Lacquer & Auto Supply Co., 4418 Woodward ave. **Adv. Agcy.**—Business Pub. International, 330 W. 42nd st., New York, N. Y.

STERLING CABLE CORP., 3529 Twenty-fourth st., Port Huron, Mich. Cable and wire, battery cables, battery terminals, ignition and lighting, ignition terminals, wiring harness. V. F. Dobbins, pres.; J. A. Minch, vice-pres.; F. H. Landwehr, secy.; J. H. Housholder, treas. **Det. Rep.**—C. E. Sharp, 705 Donovan bldg. **Adv. Agcy.**—Sidener & VanRiper, Inc., Circle Tower, Indianapolis, Ind.

STERLING MOTOR TRUCK CO., Inc., 2021 S. 54th st., Milwaukee, Wis. Motor trucks. W. G. Sternberg, pres.; E. M. Sternberg, vice-pres.; O. E. Held, secy.-treas.; B. M. Myhre, sales and adv. mgr.; A. C. Wollensak, engr.; G. Hasselreiter jr., pur. agt.

STERLING PRODUCTS CO., 2457 Woodward ave., Detroit, Mich. Sanders, filter traps. C. B. Johnson, gen. mgr.; F. D. Nunemaker, sales mgr.; W. Kroll, engr.; C. T. Ronan, pur. agt. **Adv. Agcy.**—Rolfe C. Spinning, Inc., 1236 Maccabees bldg., Detroit, Mich.

STEVENS WALDEN, Inc., 475 Shrewsbury st., Worcester, Mass. All kinds of standard and special wrenches. H. W. Bleckley, pres., gen. mgr.; H. Parker Adams, vice-pres., pur. agt.; George H. Mirick, secy.; B. H. Crowell, gen. supt.; H. O. Emerson, prod. mgr.; I. L. LeClair, sales and adv. mgr.; George H. Braman, engr. **Det. Rep.**—C. A. Strelinger Co., 149 E. Larned st.

STEWART, D. A. OIL CO., 2727-2753 S. Troy st., Chicago, Ill. Lubricants. H. A. Greene, pres.; W. H. Oldacre, vice-pres., gen. mgr.; T. B. Langdon, vice-pres., sales mgr.; H. M. Millar, secy.-treas.; L. S. Perkins, pur. agt. **Det. Rep.**—B. W. Deacon, 4461 W. Jefferson ave.

STEWART, F. W. MFG. CORP., 340 W. Huron st., Chicago, Ill. Speedometer parts, tools and equipment, flexible shafting, key machines, blanks and accessories, remote controls for auto radios. F. W. Stewart, pres., treas.; D. I. Stewart, vice-pres.; O. C. Koch, gen. mgr., secy.; F. V. Epperson, sales mgr.; R. A. Thies, adv. mgr.; M. C. Lanmon, engr.

STEWART MOTOR CORP., 93 Dewey ave., Buffalo, N. Y. Trucks, buses. T. R. Lippard, pres.; R. P. Lentz, vice-pres.; Jas. Forsyth, secy.-treas.; F. J. Suttner, sales mgr.; H. C. Smith, engr.; W. M. Bowen, pur. agt. **Adv. Agcy.**—Addison Vars, Inc. 344 Delaware ave., Buffalo, N. Y.

STEWART-WARNER CORP., 1826 Diversey Parkway, Chicago, Ill. Alemite lubrication systems, lubricants and motor oil, "south wind" heaters, speedometers, gauges, instrument panels, radios and other accessories. James S. Knowlson, chmn., J. E. Otis jr., pres.; F. A. Hiter, vice-pres. in chge. of sales, gen. mgr.; Frank A. Ross, vice-pres. in chge. of mfg.; T. T. Sullivan, secy.-treas.; Charles A. Fine, sales mgr.; Frederick R. Cross, adv. mgr.; A. W. LeFevre, engr.; Geo. I. Meyer jr., dir. of pur. **Det Rep.**—Stewart-Warner Corp., 3-140 General Motors bldg. **Adv. Agcy.**—Hays MacFarland & Co., 333 N. Michigan ave., Chicago, Ill.

STIMMEL WINCH CO., Inc., 37-24 22nd st., Long Island, N. Y. Winches, cranes, power take-offs and universal joints, etc. L. Stimmel, pres., sales mgr.; I. Orzeck, treas.; B. Lesser, gen. and adv. mgr.

STINSON AIRCRAFT CORP., Wayne, Mich. Land or water-planes. A. I. Lodwick, pres.; W. A. Mara, vice-pres.; O. R. Stocke, vice-pres., treas.; R. S. Pruitt, secy.

ST. LOUIS SPRING CO., 6650 Easton ave., St. Louis, Mo. Automobile springs, piston rings. Hubert P. Moog, pres., adv. mgr.; A. A. Apple, vice-pres., sales mgr.; Louis Mayer, secy.; S. Alva Moog, gen. mgr., treas.; Henry Paine, engr.; Hubert Moog jr., pur. agt. **Adv. Agcy.**—Beecher Advertising Agency., 1716 Olive, St. Louis, Mo.

STOLPER STEEL PRODUCTS CORP., 3258 W. Fond du Lac ave., Milwaukee, Wis. Industrial and automotive fabricated steel parts, including fuel tanks, hoods, fenders, running boards and stampings. C. F. Stolper, chmn., treas.; D. D. Wensink, pres., gen. mgr.; Henry Willer jr., secy.; P. E. Prill, engr., fcty. mgr.; A. F. Komisarek, pur. agt. **Adv. Agcy.**—Trayton Davis & Assoc., 759 N. Milwaukee st., Milwaukee, Wis.

STONER-McCRAY SYSTEM, 1312 Grand ave., Des Moines, Ia. Commercial signs of all types. T. I. Stoner, pres., gen. mgr.; F. T. Brand, vice-pres., outdoor adv. sales mgr.; L. B. Stoner, secy.; M. E. Wallace, treas.; John Koerner, neon and comml. sales mgr.; John Koerner, pur. agt. **Det. Rep.**—A. J. Reinschreiber, First Natl. Bank bldg., Chicago, Ill.

STORM MFG. CO., Inc., 406 Sixth ave., S., Minneapolis, Minn. Cylinder boring bars, connecting rod aligners, piston grinder, tension indicating wrench, hones, motor reboring plates, ring gap saw, piston vise. S. G. Harwood, pres., gen. mgr.; H. W. Nelson, secy.; R. H. Booth, sales and adv. mgr.; Hans Peterson, engr.; H. A. Griebenow, pur. agt. **Adv. Agcy.**—Mitchell Adv. Agency, Minneapolis, Minn.

STOUT ENGINEERING LABS., Inc., 2124 S. Telegraph rd., Dearborn, Mich. Experimental engineering. Wm. B. Stout, pres.; Frank M. Smith, vice-pres., gen. mgr.; Clinton E. Searle, secy.-treas.; Louis M. Marks, pur. agt.

STOVER MFG. & ENGINE CO., 303 N. Henderson ave., Freeport, Ill. Pistons, piston pins, cylinder heads, cylinder sleeves. John W. Henney, chmn.; P. A. Boyd, pres., gen. mgr.; Lee Madden, C. H. Swartz, vice-pres., sales mgrs.; Chas. H. Green, secy.; H. Edens, engr.; C. H. Davis, pur. agt.

ST. PAUL HYDRAULIC HOIST CO., 2207 University ave., S. E., Minneapolis, Minn. Hydraulic hoists and steel dump bodies for trucks, etc. A. F. Brooker, gen. mgr.; W. S. Scruggs, sales mgr.; H. O. Day, engr.; F. J. Hasselman, pur. agt.; W. E. Dunn, asst. treas.

ST. PIERRE CHAIN CORP., Frank st., Worcester, Mass. Tire chains, drop forgings, automotive pliers and tools. Henry St. Pierre, chmn., gen. mgr.; Thomas St. Pierre, vice-pres., pur. agt.; Bertram Durell, secy.

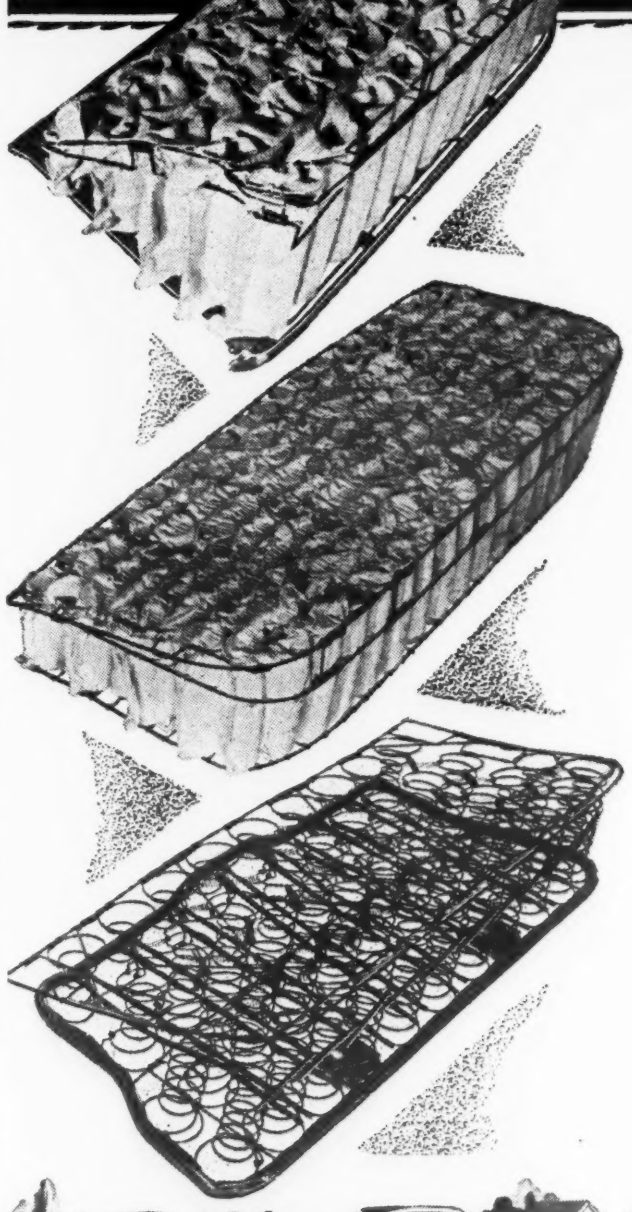
STUDEBAKER CORP., 635 S. Main, South Bend, Ind. Motor cars and trucks. Paul G. Hoffman, pres.; H. S. Vance, chmn.; Geo. D. Keller, vice-pres. in chge. of sales; K. B. Elliott, vice-pres. and asst. to the pres.; R. E. Cole, vice-pres. in chge. of engr.; R. A. Vail, vice-pres. in chge. of mfg.; A. G. Rumpf, secy.-treas; H. E. Dalton, compt.; C. S. Fletcher, sales mgr.; R. F. Gloster, asst. sales mgr.; C. H. Wondries, dir. Nat. accts. div.; E. C. Mendler, mgr. parts and acces. div.; D. O. Wilson, gen. serv. mgr.; W. S. James, chief engr.; J. R. Hughes, chief body engr.; P. O. Peterson, pur. agt.; R. G. Hudson, mgr. truck div.; C. F. Watson, dir. truck sales; S. A. Jeffries, chief truck engr. **Studebaker Pacific Corp.,** C. K. Whittaker, pres.; Stanley Whitworth, vice-pres.; J. H. Wright, compt. **Studebaker Export Corp.** A. L. Frank, pres. **Studebaker Corp. of Canada, Ltd.** M. S. Brooks, pres. **Adv. Agcy.**—Roche, Williams & Cunnyngham, Inc., Chicago, Ill.

(See display advertising index)

(Continued on Next Page)

Building Comfort into Millions of Automobiles...

L. A. Young, at his desk in Detroit



Much of the delightful riding comfort, which you enjoy, in your automobile is directly due to the perfected spring cushions used in the seats and backs of the modern motor car.

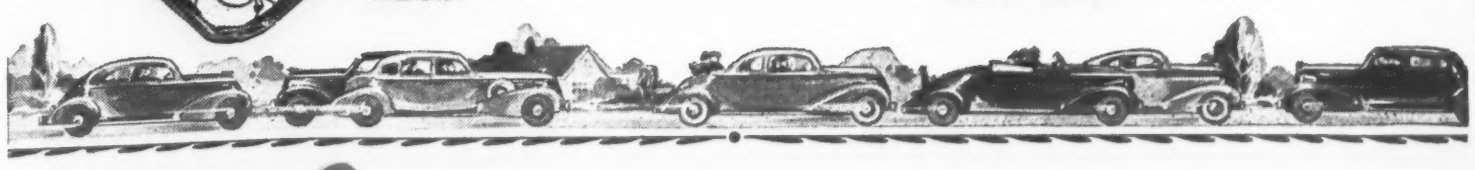
The most important and most widely used of these spring units have been developed by the L. A. Young Spring & Wire Corporation.

8 out of 10 new automobiles come equipped with L. A. Young products.

Other important products produced by this institution include mattress and bed springs, valve springs, industrial springs of all description, automobile instrument panels, automobile interior mouldings, refrigerator shelving, wire baskets, and a wide variety of diversified wire and metal products.

Sincerely,

Founder and Chairman of the Board
The L. A. Young Spring & Wire Corporation
Detroit, Michigan



Who's Who

(Continued from Previous Page)

STROBRIDGE LITHOGRAPHING CO., Cincinnati, O. Posters, window displays and catalogs. Nelson Strobridge, chmn.; W. H. Merten, pres., gen. mgr.; H. A. Merton, sales mgr.; Andrew Donaldson, adv. mgr. **Det. Rep.**—R. J. Holihan, 6-254 General Motors bldg. **Adv. Agcy.**—Ellis T. Gash Co., Chicago, Ill.

SUNAIR AUTO TOP CO., Inc., 250 W. 57th st., New York, N. Y. Sliding roofs for motor vehicles. Donald Melhado, pres., treas.; George Kamir, vice-pres., secy. **Adv. Agcy.** — C. Frederick Bell, 444 Madison ave., New York, N. Y.

SUN MFG. CO., 3012 Clybourn ave., Chicago, Ill. Service equipment, motor testers, combustion testers. V. L. Westberg, Robert Kane, vice-pres.; O. L. Rhoades and J. R. Tapp, partners. **Det. Rep.**—E. E. Fitch, 1175 Hibbard st.

SUNDAY PRODUCTS, Inc., 1579 Milwaukee ave., E., Detroit, Mich. Automobile heaters. Karl F. Johnson, pres., Paul Johnson, Paul Burke, vice-pres.; Nelson Weber, engr.; H. B. Schmid, pur. agt.

SUNNEN PRODUCTS CO., Inc., 7900 Manchester ave., St. Louis, Mo. Cylinder grinders, pin hole grinders, bushing grinders, rod aligners, valve lifters. Joe Sunnen, pres., treas.; W. A. Douglass, vice-pres., sales mgr.; Cornelia Sunnen, secy.; O. R. French, adv. mgr.; M. Langford, engr.; L. B. Ambruster, pur. agt.; C. J. Schuepbach, credit mgr.; G. P. Anstis, works mgr. **Adv. Agcy.**—Okleigh R. French & Assoc., St. Louis, Mo.

SUPCO PRODUCTS CORP., 109-123 W. 64th st., New York, N. Y. Hydraulic brake parts, brake hose, brake fluid, cables, parts for vacuum power brakes. Jack Schwartz, pres., sales mgr.; Saul Gottlieb, secy.-treas.; Ernest Reinhardt, engr.; R. Ouslander, pur. agt. **Det. Rep.**—Lou Theaman, 2015 Dorchester rd., Brooklyn, N. Y. **Adv. Agcy.**—Tudor Advertising Agency, 299 Madison ave., New York, N. Y.

SUPERIOR BODY CO., East Kirby st., Lima, O. School and passenger buses, hearse and ambulance bodies. H. L. Breckenridge, pres.; J. H. Shields, secy.-treas., head of sales; H. A. Koler, asst. secy.; J. A. Vaughan, gen. mgr.; R. W. Snook, engr.; R. D. Johns, pur agt. **Adv. Agcy.**—Cargill Co., Grand Rapids, Mich.

SUPERIOR FOUNDRY CO., 3542 E. 71st st., Cleveland, O. Gray iron, semi-steel, electric furnace and alloy castings. G. J. Feiss, pres., gen. mgr.; L. I. Miller, vice-pres.; S. P. Schloss, secy.-treas.; H. F. Randall, sales and adv. mgr.; J. Cunningham, pur. agt.; N. S. Snow, plant mgr. **Det. Rep.**—J. H. Connor, 706 Stephenson bldg.

SUPERIOR PISTON RING CO., 6425 Epworth blvd., Detroit, Mich. Piston rings. Ernest R. Hellman, pres.; John A. Olson, vice-pres.; R. S. Rowan, secy.-treas.; I. C. Vollbrecht. **Det. Rep.**—Superior Motor Products Co., 603 New Center bldg.

SUPERIOR STEEL CORP., Carnegie, Pa. Hot and cold rolled strip steel and stainless steels of all analysis. Frank R. Frost, pres.; Wm. P. Ewing, vice-pres.; C. D. Claney, secy.; N. K. Schaller, treas.; John Schultz, pur. agt. **Det. Rep.**—Superior Steel Corp., 1017 Fisher bldg.

SUTHERLAND LEATHER & FELT CO., 743 Beaubien st., Detroit, Mich. Boots, checks, felt, gaskets, leather packings leather straps, washers, web straps. Clarence L. Walk, pres., treas.; Raymond C. Walk, vice-pres., secy.

SYNCHRO-START PRODUCTS, 816 Summit st., Toledo, O. Switches of all types, control sets, signals, etc. Alfred Pulford, pres.; W. J. Williams, vice-pres., gen. mgr.; Dayton Pulford, treas.; C. A. Genske, engr. **Adv. Agcy.**—Bradford & Co., 1220 Madison ave., Toledo, O.

T

TABOR MFG. CO., 6225 Tacony st., Philadelphia, Pa. Molding machines, cupolas, sand blast and cleaning equipment, ladles, abrasive cutoff machines, cold saws, milling cutters. F. R. Wallace, pres.; L. S. Lewis, vice-pres., secy.; R. M. Maull, treas.; I. E. Moses, pur. agt. **Det. Rep.** — Charles H. Ellis, Detroit-Leland hotel. **Adv. Agcy.**—Howard Law Co., 44 N. 4th st., Philadelphia, Pa.

TACONY FILE AND HARDWARE CO., N.W. Cor. American and Somerset sts., Philadelphia, Pa. Coil files. F. G. Griscom, pres., pur. agt.; Sylvester Saponari, secy.-treas.; Wm. Hayes, gen. mgr. **Det. Rep.**—Geo. W. Marquardt, 900 W. Van Buren st., Chicago, Ill.

TAFT-PEIRCE MFG. CO., 32 Mechanic ave., Woonsocket, R. I. Jigs, fixtures, special tools and machinery, contract machine work, gages, production and inspection tools, adjustable reamers, magnetic chucks. F. S. Blackall jr., pres., gen. mgr.; Wm. A. Gordon III, secy.; C. B. Gardiner, adv. mgr.; A. M. Robinson, pur. agt. **Det. Rep.** — J. B. Rousseau, 2921 E. Grand blvd. **Adv. Agcy.** — Sutherland-Abbott, 234 Clarendon st., Boston, Mass.

TAGLIABUE, C. J. MFG. CO., Park and Nostrand aves., Brooklyn, N. Y. Thermometers, pyrometers, indicating, recording and controlling instruments. George A. Terhune, adv. mgr. **Det. Rep.** H. W. Kerr, 5902 Carnegie ave.

TAYLOR SALES ENGINEERING CO., 125 E. Lexington ave., Elkhart, Ind. Oil suction intake. Charles E. Taylor and Harry E. Lerner, co-partners; Harry E. Lerner, gen. mgr.; Charles E. Taylor, sales mgr.; Bailey L. Canfield, engr. **Det. Rep.** — Walter R. Groves, 18975 Oak drive.

TELEMOTOR CORP., 260 Fifth ave., New York, N. Y. Inter-communication equipment. M. N. Leibowitz, pres., gen. mgr.; M. Openshaw, vice-pres.; B. Leibowitz, secy.; A. Bernstein, engr.

TEMPLETON, KENLY & CO., 1020 S. Central ave., Chicago, Ill. Truck jacks, body and frame straightening kits, pit-lift jacks. W. B. Templeton, pres.; J. B. Templeton, vice-pres., sales mgr.; F. W. Krickhan, secy.; F. J. Jakoubek, engr. R. Webb, pur. agt. **Det. Rep.**—Buhl Sons Co., Foot of Adair st.

TERNSTEDT MFG. DIV., General Motors Corp., 6307 W. Fort st., Detroit, Mich. Automobile body hardware. Sherrod E. Skinner, gen. mgr.; Gardner S. Staunton, sales mgr.; J. G. Hickman, engr.; O. R. Wysong, pur. agt.; W. H. Monahan, comptr.; E. J. Hanson, works mgr.

TEXAS AUTOMOTIVE DEALERS ASSN., Suite 308 Gunter hotel, San Antonio,

(Continued on Next Page)

Total Passenger Car Registrations by States, '28-'37

(Figures supplied by U. S. Bureau of Public Roads as of December 31st)

STATES	1928	1929	1930	1931	1932	1933	**1934	**1935	**1936	**1937
Alabama	235,026	247,701	239,170	212,493	194,271	176,523	190,971	203,376	246,557	257,248
Arizona	86,036	98,327	98,480	92,939	80,248	74,927	79,795	††85,158	94,473	106,237
Arkansas	181,280	193,396	193,218	149,456	113,594	155,262	162,062	167,086	169,389	173,575
California	1,582,477	1,760,308	1,810,969	1,798,068	1,740,755	1,738,720	1,768,699	1,897,593	2,060,533	2,189,378
Colorado	260,906	274,988	276,847	276,376	255,854	239,058	246,373	††256,148	284,120	282,123
Connecticut	261,091	278,057	279,830	302,594	270,192	262,187	301,002	312,671	338,196	368,473
Delaware	41,195	44,728	45,533	*45,211	*43,675	*42,614	44,776	46,868	49,619	53,285
Florida	296,691	288,684	274,705	271,536	248,066	234,246	277,489	††299,045	323,022	347,837
Georgia	277,881	310,362	294,461	274,576	245,666	278,935	316,731	327,645	337,391	363,641
Idaho	96,960	104,398	104,526	96,228	82,009	81,371	90,926	96,778	107,060	113,605
Illinois	*1,314,003	*1,411,753	1,430,676	1,411,261	1,311,327	*1,276,864	1,281,976	††1,340,340	1,456,652	1,554,567
Indiana	706,713	741,366	747,366	732,846	675,107	653,710	679,582	716,994	766,284	815,724
Iowa	672,447	714,919	706,196	670,024	608,023	562,802	590,873	††618,487	644,253	657,734
Kansas	471,897	*507,529	*511,384	*478,692	*433,006	*445,583	452,855	473,038	490,793	493,639
Kentucky	272,636	298,716	295,161	292,357	259,688	262,436	294,268	303,593	320,138	345,114
Louisiana	223,445	234,565	230,586	215,267	197,024	190,681	198,885	††209,426	228,361	245,665
Maine	139,460	147,962	148,722	149,467	135,221	132,902	141,185	142,961	150,454	157,736
Maryland	275,221	281,034	283,870	289,292	280,579	278,546	286,638	296,148	323,115	332,928
Massachusetts	637,153	719,436	743,288	736,302	698,358	689,934	682,750	680,157	709,256	742,521
Michigan	*1,084,615	*1,219,158	*1,161,051	*1,078,345	*1,012,951	*955,570	1,025,548	1,112,148	1,234,692	1,359,665
Minnesota	583,789	630,703	624,902	611,966	581,303	580,113	593,584	620,891	668,915	704,437
Mississippi	214,754	217,362	203,443	*152,929	*128,577	131,764	140,819	††152,983	159,051	173,214
Missouri	636,717	*671,237	*670,145	*656,830	*618,195	*594,567	631,783	650,141	681,190	701,894
Montana	104,231	115,285	109,549	*103,129	*88,682	*82,765	97,249	114,170	127,839	134,729
Nebraska	358,173	375,946	367,587	356,283	322,555	336,704	349,893	346,859	352,930	350,833
Nevada	21,733	25,302	23,388	25,218	24,851	22,397	25,755	27,878	30,700	32,563
New Hampshire	88,594	94,900	93,155	92,839	87,837	87,759	90,525	93,699	97,361	99,983
New Jersey	629,748	698,959	719,696	736,506	726,178	723,506	735,725	758,401	808,254	861,795
New Mexico	63,743	76,000	70,450	65,441	61,852	61,353	66,606	73,837	85,427	90,833
New York	1,760,549	1,922,068	1,966,981	1,966,436	1,935,744	1,942,249	1,965,341	††2,024,043	2,134,350	2,233,695
North Carolina	418,864	430,651	397,133	374,162	326,064	332,648	384,193	397,772	434,194	449,897
North Dakota	151,778	162,092	155,383	144,705	129,642	*128,547	129,825	135,366	137,523	141,104
Ohio	1,450,994	1,560,182	1,555,093	*1,518,696	1,421,830	*1,396,125	1,453,420	1,541,097	1,604,775	1,695,648
Oklahoma	465,550	510,401	490,947	428,140	370,760	385,755	405,364	416,939	441,276	448,588
Oregon	227,404	247,131	251,188	255,275	224,285	207,202	232,706	250,377	278,130	299,689
Pennsylvania	1,420,957	1,515,875	1,534,834	1,522,130	1,449,084	1,415,522	1,460,724	1,510,837	1,641,006	1,738,797
Rhode Island	106,155	114,010	116,792	118,313	114,992	118,296	123,548	129,699	140,417	148,583
South Carolina	194,267	205,683	192,141	180,280	156,648	144,940	181,828	206,014	243,509	250,820
South Dakota	171,067	*181,419	180,195	169,509	142,554	146,485	146,071	152,280	158,192	155,948
Tennessee	294,305	*329,697	330,436	316,544	267,279	278,332	298,558	309,447	328,955	341,648
Texas	1,060,028	1,165,150	1,159,139	1,086,310	1,005,981	1,013,086	1,085,108	1,124,295	1,191,313	1,237,348
Utah	84,220	95,661	96,128	91,381	81,138	84,014	84,366	87,956	96,768	105,571
Vermont	78,685	84,471	78,398	75,424	69,166	65,652	69,223	72,380	75,195	79,606
Virginia	306,911	328,525	318,582	322,594	314,168	288,048	315,940	324,626	352,281	371,708
Washington	344,977	379,995	382,874	360,796	381,488	364,858	357,280	††385,003	419,493	450,906
West Virginia	215,787	228,715	225,900	213,949	192,221	193,570	166,527	211,668	235,913	246,162
Wisconsin	646,747	689,447	677,452	640,476	587,906	566,450	588,733	623,352	690,041	713,166
Wyoming	48,760	51,880	51,579	51,388	46,330	41,917	51,660	††55,405	61,129	64,459
District of Columbia	112,505	135,455	139,733	155,334	142,890	149,790	145,065	152,775	161,725	165,257
TOTALS	21,379,125	23,121,589	23,050,262	22,366,313	20,885,814	20,600,543	14,143,565	22,535,820	24,197,685	25,449,924

*Buses not included. **Includes buses, taxicabs. ††Includes buses.

—NEW!—

EVEREADY Cooling System Cleaner

A brand new type of cleaner . . . removes rust and scale, "cuts" grease and oil, leaves inside of radiator bright and clean. Harmless to hoses, gaskets, car finish — less corrosive to aluminum and other metals than water.

EVEREADY Flushing Gun

Full blast air valve, hair-trigger control, two-position water valve, parallel hose lines, detachable nozzle for hot-water heaters...a *better* gun!

FOR MAXIMUM QUIETNESS AND ENDURANCE

NORMA-HOFFMANN BEARINGS CORP'N, STAMFORD, CONN., U.S.A.

8-Year Trend in Car Sales Operations

	1937*	1936*	1935*	1934*	1933*	1932*	1931*	1930§
Number of dealers reporting	586	1,075	1,327	1,370	3,552	‡	688	2,234
New cars sold at retail	139,625	201,420	249,592	143,843	‡	‡	114,376	372,682
New cars sold on installment	79,846	122,613	144,736	78,204	‡	‡	71,819	232,223
Used cars sold at retail	230,080	330,603	393,780	230,223	‡	‡	195,160	611,120
Used cars sold on installment	138,377	193,255	246,525	133,393	‡	‡	117,792	395,872
Used cars junked	18,846	36,747	38,236	17,527	‡	‡	24,671	82,730
Used cars traded on new sales	117,140	170,629	211,600	107,490	‡	‡	91,786	279,729
Used cars traded on used sales	127,031	168,330	216,713	108,882	‡	‡	91,158	299,792
Total used cars bought	244,171	338,959	428,313	216,372	‡	‡	182,944	579,521
Average new car sales per dealer	238	187	188	105	‡	‡	171.22	166.82
Average used car sales per dealer	393	308	297	168	‡	‡	292.16	273.55
Average used cars traded in per dealer	417	314	323	157.9	‡	‡	273.87	259.41
Percentage Sold on Installments:								
New cars	57.2	60.9	58.0	54.4	56.8	54.6	62.8	62.3
Used cars	60.1	58.5	62.6	58.0	56.8	47.0	60.4	64.8
All cars	59.0	59.3	60.8	56.8	56.8	48.6	61.3	63.6
Percentage of Trade-Ins and Used Car Sales:								
Trade-ins on sales of new cars	83.9	84.7	84.8	74.7	83.8	88.7	80.2	75.1
Trade-ins on sales of used cars	55.2	50.9	55.0	47.3	51.5	47.7	46.7	49.1
Total trade-ins in percent of new cars sold	174.9	168.3	171.6	150.4	177.5	175.6	160.0	155.5
Used cars sold in per cent of new cars sold	178.3	182.4	173.1	172.2	178.0	185.9	170.6	164.0
Used cars junked in per cent of total trade-ins	7.7	10.8	8.9	8.1	12.9	14.3	13.5	14.3
Inventories:								
New cars on hand Jan. 1	9,421	17,612	12,015	4,813	21,464	(2-1)	12,655	56,826
New cars on hand Dec. 31	18,940	13,325	25,621	7,758	18,065	(1-31)	9,741	38,915
Used cars on hand Jan. 1	27,802	32,717	33,161	19,223	50,781	(2-1)	24,497	88,319
Used cars on hand Dec. 31	27,487	38,244	49,315	24,805	50,257	(1-31)	23,659	74,399
Per cent change, new car inventory	+101.04	—24.34	+113.24	+61.19	—15.84		—23.03	—20.27
Per cent change, used car inventory	—1.13	+16.89	+48.71	+29.04	—1.03		—3.42	—15.76

§Jan. 1 to Sept. 30. *Calendar year. ‡Data not available. Source: National Automobile Dealers Assn.

Who's Who

(Continued from Previous Page)

Tex. Trade association. J. R. Holley, pres.; W. A. Williamson, 1st vice-pres., gen. mgr.; Raymond Pearson, 2nd vice-pres.; Ernest Allen, 3rd vice-pres.

THERMOID CO., Whitehead rd., Trenton, N. J. Brake lining, car washer hose, clutch facing, air hose, fan belts, brake hose, welding hose, radiator hose, car heater hose, radiator testing cap plugs, universal joint discs and couplings. C. W. Barber, chmn.; F. E. Schluter, pres.; Wm. H. Hall jr., S. H. Lyons, W. D. Pardoe, vice-pres.; C. A. Schell, vice-pres. engr.; W. E. Harvey, secy.; R. H. Temple, treas.; S. K. Dennis, sales mgr.; R. W. Case jr., adv. mgr.; H. W. Searfoss, pur. agt. **Det. Rep.**—Frank Main, 7310 Woodward ave. **Adv. Agcy.**—Aitkin-Kynett Co., 1400 S. Penn Square, Philadelphia, Pa.

THIOKOL CORP., 780 N. Clinton ave., Trenton, N. J. Synthetic rubber under trade-mark name "Thiokol." Bevis Longstreth, pres., gen. mgr.; J. C. Patrick, vice-pres.; H. A. Richards, secy.; R. P. Bramley, treas.; T. F. Harragan, adv. mgr.; S. C. Earley, pur. agt.; J. W. Crosby, H. R. Ferguson, E. L. Wright, S. M. Martin jr., devel. dept. **Adv. Agcy.**—T. J. Maloney, Inc., New York, N. Y.

THOMAS STEEL CO., Delaware ave., Warren, O. Cold rolled strip steel of various types. C. G. Thomas, pres., treas.; C. H. Lewis, vice-pres., secy.; H. A. Mentall, gen. supt. W. F. Rummell, sales mgr.; W. D. Khonle, pur. agt.

THOMPSON PRODUCTS, Inc., 2196 Clarkwood rd., Cleveland, O. Engine valves, valve insert seats, valve guides, pistons, piston pins, king pins, spring bolts, tie rod bolts, drag links, tie rods, starting cranks, etc. Fred C. Crawford, pres.; Lee M. Clegg, sr. vice-pres.; Arch T. Colwell, vice-pres.; J. D. Wright, secy.; W. M. Albaugh, treas.; E. A. McBride, gen. mgr. Cleveland plant; M. P. Graham, gen. mgr. Detroit plant; G. V. Sevalt, sales mgr.; Fred R. Witt, adv. mgr.; H. D. Bubb, engr.; H. D. Myers, pur. agt. **Adv. Agcy.** — Griswold-Eshleman Co., Terminal Tower, Cleveland, O.

THOMSON MFG. CO., 1706 Main st., Peoria, Ill. Innerings, steel, piston expanders. Wm. H. Thompson, owner.

THORNTON TANDEM CO., 8701-79 Grinnell ave., Detroit, Mich. Four rear wheel drive for trucks. A. F. Knoblock, chmn.; S. F. Baker, pres., gen. mgr.; H. E. Slater, vice-pres., sales mgr.; E. G. Scott, vice-pres.; R. F. Barnum, secy.-treas.; N. Van Husen, engr.; F. C. Gilbert, pur. agt. **Adv. Agcy.**—Electorgraph Co., 3815 W. Fort st., Detroit, Mich.

TILLOTSON MFG. CO., Wolcott blvd., Toledo, O. Carburetors, air cleaners and fuel filters for original equipment and replacement. H. C. Tillotson, pres.; E. A. Hullison, vice-pres., engr.; H. R. Schausten, gen. mgr., secy.-treas.; H. F. Chaffee, sales mgr.; H. H. Balsmeyer, pur. agt.; A. E. Payne, fcty. mgr.

TIMKEN DETROIT AXLE CO., 100-400 Clark st., Detroit, Mich. Front and rear axles. Col. H. W. Alden, chmn.; Willard F. Rockwell, pres.; Walter F. Rockwell, R. J. Goldie, vice-pres.; S. W. Warner, secy.; A. I. Hawkins, treas.; R. L. Busse, vice-pres. in chge. of sales; L. W. Fischer, adv. mgr.; L. R. Buckendale, vice-pres. in chge. of engr.; F. H. Maisonville, pur. agt.; F. W. Parker jr., serv. mgr. **Adv. Agcy.**—Brooke, Smith & French, Hancock st., Detroit, Mich.

TIMKEN ROLLER BEARING CO., 1835 Dueber ave., Canton, O. Bearings, steel and tubing, rock bits, fuel injection equipment. H. H. Timken, chmn.; W. E. Umstattd, pres.; L. M. Klinedinst, H. K. Porter, T. V. Buckwalter, H. T. Timken jr., vice-pres.; R. C. Brower, secy.-treas.; R. P. Kelley, adv. mgr.; Peter Voss, pur. agt. **Det. Rep.**—Timken Roller Bearing Co., 1111 Fisher bldg. **Adv. Agcy.** — Zimmer Keller, Detroit Life bldg., Detroit, Mich.

TITEFLEX METAL HOSE CO., 500 Frelinghuysen ave., Newark, N. J. All-metal gasoline and oil fuel lines. C. W. Fletcher, pres.; R. H. Stone, P. L. Procter, vice-pres.; Elbert E. Husted, gen. and sales mgr.; David Ingalls, engr.; H. L. Maring, pur. agt. **Det. Rep.**—D. A. Noble, 5-211 General Motors bldg.

TOKHEIM OIL TANK AND PUMP CO., 1602 Wabash ave., Fort Wayne, Ind. Computer gasoline pumps, non-computer gasoline pumps, oil storage outfits, kerosene storage units and accessories. C. M. Niezer, chmn.; C. C. Oberly, vice-pres., gen. mgr.; J. E. Neale, vice-pres., sales mgr.; Frank B. Eilers, vice-pres., engr.; David Cunningham, secy.; J. M. Huguenard, adv. mgr.; L. M. Schwartz, pur. agt. **Det. Rep.**—H. B. Gavigan, 5868 W. Vernor Highway. **Adv. Agcy.**—Carter, Jones & Taylor, South Bend, Ind.

TOLEDO STEEL PRODUCTS CO., 3300 Summit st., Toledo, O. Valves, valve guides, water pump parts, water pumps, valve spring retainers, valve seats, springs and keys, bolts and bushings, pistons, piston pins, cylinder sleeves, tie rods, shackles. A. E. Soubert, gen. mgr.; J. E. Adams, sales mgr.; W. H. Taylor, asst. sales mgr.; J. E. Adams, adv. mgr.; L. E. Galbraith, engr.; E. Etzel, pur. agt.

TOMKINS JOHNSON CO., 617 N. Mechanic st., Jackson, Mich. Rivitors, clinchors, air and hydraulic cylinders, remote control valves, cutter, Brownie collant pumps, chucks. A. R. Johnson, pres., gen. mgr.; Dorothy M. Johnson, vice-pres.; Louise Eberhardt, secy.; Anna Miller, treas.; B. O. Ludwig, supt.; B. W. Weisel, sales mgr.; Ferne Dwelly, adv. mgr.; A. L. Johnson, engr. **Det. Rep.**—Haberkorn & Wood, 2832 E. Grand blvd.

TOMPKINS, H. S. 82-84 Dey st., New York, N. Y. Ventilators for all types of vehicles, bus hardware. H. S. Tompkins, gen. mgr.; H. S. Tompkins jr., sales and adv. mgr.; Robert Brooks, engr.

TOT-EM TRAILER CO., 339 Chesterfield ave., Birmingham, Mich. One and two-wheel trailers and parts. Thos. B. Klingensmith, pres.

TOWNSEND CO., New Brighton, Pa. Rivets, special nails, wire, headed and threaded metal products, wire specialties in steel and non-ferrous metals, machine screws, clevis pins, brake band and other tubular rivets. H. C. Weidner, pres.; J. M. Townsend, vice-pres., treas.; A. C. Townsend, gen. mgr., secy.; E. J. Vetter, sales mgr.; C. R. Bortman, adv. mgr.; M. H. Frommann, engr.; W. W. Rinehart, pur. agt. **Det. Rep.** — N. D. Hazen, 6-169 General Motors bldg.

TRAILER CO. OF AMERICA, 31st and Robertson sts., Cincinnati, O. Trailers of all types. J. Englander, pres.; A. J. Weltering, R. E. Ornick, R. George, vice-pres.; H. Ferman, secy.-treas.; C. A. Reimers, mgr. Highland Body Co.; C. H. Kenney, sales mgr.; Ross H. Wilson, adv. mgr.; A. Brandt, pur. agt.; E. Crowe, supt. of trailer plant; W. L. Payne, supt. (body plant). **Det. Rep.**—Lapeer Trailmobile Co. of Mich., 432 St. Aubin. **Adv. Agcy.**—Wilson Adv. Agency, Station O, Cincinnati, O.

TRAILER SUPPLY CO., 411 Jackson st., Wausau, Wis. Parts, supplies and equipment for house, camp and utility trailers. Jim Dandy, owner.

TRAINOR NATIONAL SPRING CO., 700 N. Main st., Newcastle, Ind. Chassis springs, spring accessories. F. J. Trainor, pres., gen. mgr.; J. W. Trainor, vice-pres.; C. D. Trainor, treas.; F. R. Trainor, sales and adv. mgr.; W. C. Ellis, engr.; H. E. Leakey, pur. agt.

TRANE CO., 2nd and Cameron ave., La Crosse, Wis. Heaters, ventilators, coolers, blast coils, water heating and cooling coils, direct expansion coils, product coolers, evaporative condensers, commercial air conditioners, convectors, humidifiers, dehumidifiers, heating specialties. Reuben N. Trane, chmn.; D. C. Minard, E. H. Erickson, C. A. Thatro, vice-pres.; R. H. Anderegg, vice-pres., engr.; A. T. Holmes, secy.; Frank Hood, treas.; R. N. Trane, gen. mgr.; C. A. Thatro, sales mgr.; L. A. Trumble, adv. mgr.; R. H. Pearse, pur. agt. **Det. Rep.**—J. D. Cantwell, 8316 Woodward ave. **Adv. Agcy.**—Addison Lewis and Assoc., Foshay Tower, Minneapolis, Minn.

TRANSITONE AUTOMOBILE RADIO Corp., Beury bldg., 3701 N. Broad st., Philadelphia, Pa. Philco auto radios. Russell L. Heberling, pres., gen. mgr.; Sayre M. Ramsdell, vice-pres.; William Balderston, vice-pres. in chge of mfgrs. div.; Howard McDaniel, secy.; John Ballantyne, treas.; O. F. Achtenhagen, sales mgr. mfg. div.; March Fisher, sales mgr. distr. div.; Ernest B. Loveman, adv. mgr.; J. H. Pressley, engr.; G. I. H. Little, pur. agt. **Det. Rep.**—William Balderston, vice-pres. in chge. of mfgrs. div., 2778 E. Grand blvd. **Adv. Agcy.**—Hutchins Advertising Co., Cutler bldg., Rochester, N. Y.

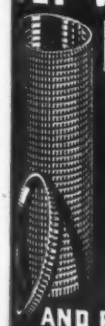
TRAVELCAR CO., Inc., 19400 W. Eight-Mile rd., Detroit, Mich. Trailers. J. P. Malley, pres., gen. mgr.; A. P. Stranahan, vice-pres.; F. S. Malley, treas.; E. J. Taylor, sales mgr.; P. B. Maxon, adv.

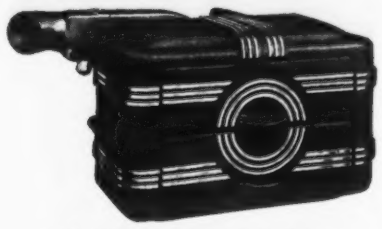
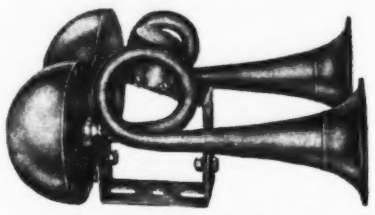
(Continued on Next Page)

PLASTIC & RUBBER

Parts and Molds
Compression • Injection
QUICK SERVICE On Samples
•
ENGINEERING and DESIGNING
assistance without obligation
•
GUARANTEED DELIVERIES
on small lots or large production

IRD PLASTIC & RUBBER CO.
tory—1037 Hilton Road, Ferndale, Mich.
ce—807-8 Murphy Bldg. TOwnsend 8-0910
HLAND PARK • DETROIT, MICHIGAN

FLY WHEEL RING GEARS

ACCURATELY MADE
100% INSPECTED
UP TO THE MINUTE
EQUIPMENT FOR
SPEEDY PRODUCTION
AND PROMPT DELIVERY
Wohlert
CORPORATION
LANSING, MICHIGAN

EA
AMERICA'S LEADER

EA HOT WATER HEATER
IN THE MANUFACTURE OF
AUTOMOBILE HORNS and HOT WATER HEATERS.
Pioneers of the AEROTHERM feature for windshield defrosting.

EA HORN, MODEL F
The Products Most Favored by Leading Car Manufacturers of America.
Original or Optional Equipment.
EA LABORATORIES INC.
BROOKLYN, N. Y.

Manufacturers of
Hot and Cold Rolled
STRIP STEEL
McLOUTH STEEL CORPORATION
STRIP STEEL
DETROIT
300 SOUTH LIVERNOIS AVENUE VINEWOOD 1-1414

Who's Who

(Continued from Previous Page)

mgr. Adv. Agcy. — Cox Associates, E. Euclid ave., Detroit, Mich.

TRICO PRODUCTS CORP., 817 Washington st., Buffalo, N. Y. Accessories, including windshield wipers, fans, horns, windshield washers, vacuum pumps, etc. J. R. Oishei, pres., gen. mgr.; W. J. Chellew, vice-pres.; S. H. Evans, secy.; C. F. Conn, sales mgr.; R. J. Oshei, adv. mgr., pur. agt.; E. C. Horton, engr. Det. Rep.—C. H. Oshei, General Motors bldg. Adv. Agcy.—Addison Vars, Inc., Delaware ave., Buffalo, N. Y.

TRIPLE-A-SPECIALTY CO., 2101-11 Walnut st., Chicago, Ill. Battery cables and battery accessories, automotive wires, wiring assemblies, battery testers, motor analyzer, testers for all anti-freeze solutions, battery chargers and growlers. Arthur M. Callman, pres., treas.; Arthur A. Abrams, vice-pres.; Harold W. Eden, engr., pur. agt. Det. Rep.—John M. Rosenberg, 2101 Walnut st., Chicago, Ill.

TRIPLEWEAR BRAKE LININGS CORP., 37-61 Kentucky ave., Paterson, N. J. Brake linings and blocks, asbestos wick. N. E. Heil, pres., gen. mgr.; J. O. Camp, vice-pres., sales mgr.; H. Westerhoff, asst. secy.-treas.; Walter Scott, adv. mgr.; C. Ceremido, engr. Det. Rep.—P. N. Rice, 2648 Prospect ave., Cleveland, O. Adv. Agcy.—Walter Scott Adv. Agency, 299 Madison ave., New York, N. Y.

TRIPPE SALES CO., 600 W. Jackson blvd., Chicago, Ill. Driving lights, ambulance lights, etc. Richard R. Cook, pres.; Graham Trippe, secy.; S. H. Moss. Det. Rep.—W. H. Storey, 3902 Nottingham. Adv. Agcy. — Aitken-Kynett Co., 1400 S. Penn Sq., Philadelphia, Pa.

TROPIC-AIRE, INC., 4501 W. Augusta blvd., Chicago, Ill. Hot water heaters for automobiles and buses, tire chains for dual wheel motor vehicles. C. H. Will, pres., treas.; C. E. Wickman, O. S. Caesar, vice-pres.; G. S. Stevens, secy.; R. E. Bishop, gen. sales mgr.; L. L. Joos, adv. mgr.; H. W. Fink, engr.; F. G. Schminder, pur. agt. Det. Rep.—J. V. Harding, 201 Basso bldg.

TROTWOOD TRAILERS, Inc., 11-15 N. Broadway, Trotwood, O. Trailer coaches. Ray F. Kuns, pres.; W. J. Wagner, vice-pres., treas.; J. B. Flora, secy., gen. mgr. Adv. Agcy.—J. Horace Lytle Co., Dayton, O.

TRUCK EQUIPMENT CO., Inc., 1791 Fillmore ave., Buffalo, N. Y. Third axles, gravity spring suspension, dump bodies. Ellsworth R. Boeck, pres.; Howard H. Weber, vice-pres., sales mgr.; George W. Fotis, adv. mgr.; Edwin J. Boeck, engr., treas.; E. H. Zittel, pur. agt. Det. Rep.—Rim & Wheel Service, Inc., 5132 Third ave.

TRUCKTOR CORP., 156 Wilson ave., Newark, N. J. Six-wheel units for all makes and sizes of motor trucks. W. D. Sargent, chmn.; Clayton Farris, pres.; C. R. Lord, vice-pres.; C. L. Lehman, secy.; George Keller, Chief engr.; G. M. Nelson, pur. agt. Adv. Agcy.—A. M. Stockman, New York, N. Y.

TRUNK ENGINEERING CORP., 1802 E. 38th st., Cleveland, O. Semi-trailers, truck equipment, dump bodies, winches. J. L. Glick, pres., gen. mgr.; R. L. Morse, vice-pres.; H. A. Spring secy.; R. L. Morse, treas.

TRUSCON STEEL CO., 6100 Truscon ave., Cleveland, O. Frames for auto trunks, tractors, axle housings and covers, oil pans, pressed steel stampings, etc. Myron A. Wick, pres.; K. D. Mann, vice-pres.; A. C. Ruihley, secy.-treas.; H. Woodhead, gen. mgr.; W. M. Whalen, sales mgr.; R. P. Dodds, adv. mgr.; T. A. Sindelar, engr.; M. F. Breen, pur. agt.; G. L. Schwartz, prod. mgr.; R. H. Thoms, works mgr. Det. Rep.—T. G. Watkins, 615 Wayne st.

TUMBLER, J. A. LABORATORIES, 423 S. Hanover st., Baltimore, Md. Automotive chemical specialties. Joseph A. Tumbler, pres.; Geo. J. Steine, sales and adv. mgr.; L. J. La Brie, engr.

TUNG-SOL LAMP WORKS, Inc., 95 Eighth ave., Newark, N. J. Automotive lamps, radio panel lamps, tubes. H. W. Harper, chmn.; Louis Rieben, pres., gen. mgr.; D. A. Harper, 1st vice-pres.; A. T. Browner, 2nd vice-pres.; R. E. Carlson, 3rd vice-pres.; A. T. Browner, secy.-treas.; R. E. Carlson, sales mgr., initial equip.; W. B. Masland, sales mgr., replacement equip., adv. mgr.; R. K. Braunsdorff, engr., min. lamps; R. Fidler, engr., radio tubes; E. P. Garretson, pur. agt. Det. Rep. — Tung-Sol Lamp Works, Inc., General Motors bldg. Adv. Agcy.—Picard Advertising, Inc., 250 W. 57th st., New York, N. Y.

TURNER BRASS WORKS, 823 Park ave., Sycamore, Ill. Blow torches, metal spray guns, gasoline pressure camp stoves, lanterns, lamps, water heaters, soldering coppers. W. M. McAllister, pres.; John Slezak, vice-pres., gen. mgr.; N. O. Hanks, secy.; W. M. McAllister, treas.; J. R. Hollingsworth, sales and adv. mgr.; J. H. Joseph, pur. agt.; R. E. Knudsen, export mgr.

TURNER MFG. CO., 404 W. Superior st., Kokomo, Ind. Wheel balancing weights for cars and trucks, ignition timers. E. W. Turner, pres.; E. E. Turner, secy.; C. C. Kerlin, treas.

TURNSIGNAL CORP., 18 W. Chelten ave., Philadelphia, Pa. Directional signals. H. O. Smith, pres.; Wm. B. Mayo, vice-pres.; H. O. Smith jr., vice-pres., sales mgr.; H. J. Lyall, secy.; C. T. Ludington, treas.

TUTHILL SPRING CO., 760 Polk st., Chicago, Ill. Motor vehicle springs, highway guard rail, special spring steel products. H. T. Moore, pres.; W. S. Van Bergen, vice-pres.; J. H. Schmidt, secy.; O. C. Nuss, treas.

TWIN COACH CO., W. Main st., Kent, O. Gasoline, gas-electric, diesel-electric and trolley coaches. Frank R. Fageol, pres.; Wm. B. Fageol, vice-pres.; Edw. P. Taylor, treas.; O. R. Fageol, asst. to pres.; V. L. Raasch, comptr. and asst. treas.; Paul H. Brehm, gen. mgr., secy.; Ross Schram, sales and adv. mgr.; H. E. Simi, engr.; D. N. Musson, pur. agt. Det. Rep.—Wm. M. Doyle, 11697 Abington rd.

TWIN DISC CLUTCH CO., Racine, Wis. Industrial clutches, power take off units, reduction gear units. P. H. Batten, pres.; G. M. Guilbert, vice-pres., sales mgr.; A. B. Modine, Soren Sorenson, vice-pres.; G. L. Shuman, secy.; P. H. Batten, treas.; N. F. Adamson, chief engr.; E. N. Wackerhagen, pur. agt. Det. Rep.—Russell H. Smith, 2029 E. 102nd st., Cleveland, O. Adv. Agcy.—S. W. Curtiss, Inc., Circle Tower, Indianapolis, Ind.

TYRE BROS. GLASS & PAINT CO., Cor. 31st and San Pedro sts., Los Angeles, Calif. Paints, enamels, lacquers. M. Tyre, pres.; S. J. Tyre, vice-pres. Det. Rep.—W. E. Biggers, 415 Fisher bldg.

TYSON ROLLER BEARING CORP., Oberlin rd., S.W., Massillon, O. Cageless tapered roller bearings. Ralph H. Maxson, pres.; Earl R. Earnest, vice-pres., pur. agt., asst. treas.; Geo. C. McMullen, vice-pres. in chge. of sales; Geo. Neupauer, secy.; H. J. Deal, vice-pres., for serv. sales.

U

UNDERWOOD ELLIOTT FISHER, One Park ave., New York, N. Y. Typewriters, standard, noiseless and portable models, accounting machines, adding-figuring machine. P. D. Wagoner, pres.; L. C. Stowell, exec. vice-pres.; M. S. Eylar, vice-pres.; C. S. Duncan, secy.-treas.; W. F. Arnold, gen. sales mgr.; C. H. W. Ruprecht, adv. mgr.; W. J. Evert, pur. agt. Det. Rep.—O. H. Zaun, Griswold bldg. Adv. Agcy.—Marschalk & Pratt, 535 Fifth ave., New York, N. Y.

UNION ASBESTOS & RUBBER CO., 1811-21 S. 54th ave., Cicero, Ill. Woven and molded brake lining, clutch facings, automotive packings. L. L. Cohen, pres.; C. Mosier, vice-pres., gen. mgr.; W. H. Fehrs, asst. to vice-pres., and gen. mgr.; J. J. Somers, adv. mgr., mgr. automotive div.; R. E. Cryor, engr.; A. H. Owen, pur. agt.

UNITED AIR CLEANER DIV., United Specialties Co., 9705 Cottage Grove ave., Chicago, Ill. Air cleaners for internal combustion engines. John T. Beatty, pres., sales mgr.; H. G. Chandler, adv. mgr.; T. W. Hallerberg, engr.; L. L. Blais, pur. agt. Det. Rep.—M. A. Mieras, 2842 W. Grand blvd.

UNITED AIR LINES TRANSPORT CORP., 221 N. LaSalle st., Chicago, Ill. Air transport. W. A. Patterson, pres.; Harold Crary, vice-pres., traffic; R. W. Schroeder, vice-pres., operations; P. M. Willcox, secy.; C. E. Brink, treas.; B. B. Gragg, sales mgr.; R. E. Johnson, adv. mgr.; J. A. Herlihy, engr.; E. E. Van Vechten, pur. agt. Det. Rep.—Dan O'Leary, Book-Cadillac hotel. Adv. Agcy.—J. Walter Thompson, 410 N. Michigan, Chicago, Ill.

UNITED AMERICAN BOSCH CORP., 3664 Main st., Springfield, Mass. Magnetos, fuel injection equipment for diesel engines, radio receivers, ignition coils, ignition distributors, automatic gas water heaters. George Murnane, chmn.; Donald P. Hess, pres.; H. Waker, vice-pres., treas.; L. Beeh, J. E. Wild, G. J. Lang, vice-pres.; E. J. Wagener, secy.; C. L. Shedd, sales mgr., automotive trade; W. G. Bode, sales mgr., radio; R. W. Washburn, sales mgr., gas appliance; G. W. Carlson, adv. mgr.; J. Drennan, pur. agt. Det. Rep.—Branch Office, Stormfeltz-Lovely bldg. Adv. Agcy. — E. T. Howard Co., 40 E. 49th st., New York, N. Y.

UNITED AUTOGRAPHIC REGISTER CO., 5000 S. California ave., Chicago, Ill. Autographic registers, repair orders, automotive records, continuous forms, Varco business systems, sales registers, cash registers, parts requisitions. W. R. Barker, pres., gen. mgr.; Lewis Barker, vice-pres.; B. M. Boyd, treas.; W. L. Selig, sales mgr.; A. R. MacFarland, adv. mgr.; Louis Jensen, engr.; John Friedman, pur. agt. Det. Rep.—C. H. Jeffrey, mgr., 917 Fox bldg.

UNITED-CARR FASTENER CORP., 31 Ames st., Cambridge, Mass. Fasteners: curtain, carpet, upholstery, moulding, tubing and wiring, weatherstrip; Stampings: automobiles, special small. Sinclair Weeks, pres., treas.; A. W. Kimbell, vice-pres., gen. mgr.; Preston Upham, vice-pres.; A. S. Boynton, secy.; D. J. Rogers, asst. gen. mgr.; G. S. Maynard, sales mgr.; N. A. Dill, adv. mgr.; R. O. Chaffee, engr.; F. J. Ross, pur. agt. Det. Rep.—C. L. Hall, 2832 E. Grand blvd.

UNITED MOTORS SERVICE, Inc., 3044 W. Grand blvd., Detroit, Mich. Spark plugs, speedometers, fuel pumps, oil filters, air cleaners, gauges, farm light plants, water pumps, fans and vacuum cleaners, hydraulic brakes, shock absorbers, auto radios, starting, lighting and ignition equipment, storage batteries, horns, lamps, radiators and car heaters, roller bearings, ball bearings. C. B. Stiffler, pres., gen. mgr.; W. N. Potter, vice-pres., sales mgr.; D. A. Jones, adv. mgr.; M. H. Collins, asst. secy.; A. W. Pfeiffer, asst. treas.; R. C. Campbell, pur. agt. Adv. Agcy.—Campbell-Ewald Co., 3044 W. Grand blvd., Detroit, Mich.

UNITED PARTS MFG. CO., 1315 W. Congress st., Chicago, Ill. Hydraulic brake parts, fuel pump parts, brake cables, speedometer cables, all for replacement. Elis L. Larson, pres., gen. mgr.; Pat Malone, vice-pres., sales mgr.; Leonard N. Fisher, secy., pur. agt.; Elis L. Larson, treas. Adv. Agcy. — Van Auken-Ragland, Inc., 20 N. Wacker dr., Chicago, Ill.

UNITED SPECIALTIES CO., 409 Curtis bldg., Detroit, Mich. United Air Cleaner Div., oil bath type air cleaners—Mitchell Div., dovetails, ignition switches, rolled shapes, Mitchell cordless blind. Christian Girl, pres.; Fred Glover, vice-pres., gen. mgr.; M. D. Harrison, secy.-treas. Det. Rep.—M. A. Mieras, United Air Cleaner Div.; R. J. Schaeffer, Mitchell Div., 409 Curtis bldg.

(See display advertising index)

UNITED STATES AIR COMPRESSOR CO., 5309 Harvard Ave., Cleveland, O. Automatic air compressors, full hydraulic lifts, complete lubrication equipment, hydraulic car washers. R. L. Bacher, pres.; W. C. Smith, vice-pres., secy.; A. McNamee, asst. treas.; K. S. Clapp, gen. mgr.; F. J. Coughlin, sales mgr.; T. N. Thompson, adv. mgr.; P. I. Schultz, engr.; L. H. Bacher, pur. agt. Det. Rep.—Amco Corp., 5432 Grand River ave.

UNITED STATES ASBESTOS DIV., Raybestos-Manhattan Co., Manheim, Pa. Brake sets, roll linings, commercial blocks, clutch facings packings. Geo. R. Weber, gen. mgr.; O. H. Cilley, asst. gen. mgr.; F. A. Miller, replacement sales mgr.; E. S. Sensenderfer, adv. mgr.; J. D. Rohrer, engr.; Louis Weber, pur. agt. Det. Rep.—H. C. Dishman, 620 Fisher bldg. Adv. Agcy. — Jerome B. Gray, Inc., 12 South 12th st.

U. S. AXLE CO., Inc., 800 Water st., Pottstown, Pa. Automobile axle shafts. George C. Lees, pres., gen. mgr.; E. D. Gudebrod, vice-pres.; Kenneth Howard, secy., sales mgr.; L. E. Orgill, treas., pur. agt.

U. S. BODY & FORGING CO., Inc., 133 Tonawanda st., Buffalo, N. Y. Commercial drop forgings, automobile bodies. R. U. Carr, pres.; J. M. Glaser, vice-pres., pur. agt.; J. Blankheit, asst. secy.; H. B. Millspaugh, sales mgr., engr. Det. Rep.—R. L. Pointer, 4-124 General Motors bldg.

U. S. CLUB CAR TRAILER CO., 1002 N. Market st., Champaign, Ill. "Club Car" house trailers and commercial shells. M. D. Durham, pres., gen. mgr.; S. G. Nelson, vice-pres.; J. F. Levin, secy.-treas.; M. H. Carpenter, engr. Adv. Agcy. — Archer & Associates, 549 W. Washington, Chicago, Ill.

UNITED STATES ELECTRIC MFG. CORP., 222-228 W. 14th st., New York, N. Y. Flashlights, flashlight batteries, dry cell, lantern batteries, radio batteries, ignition batteries. Henry Hyman, pres.; Miss A. Wertheimer, secy.; N. Nelson, treas.; Samuel Cobert, sales mgr.; M. L. Rubin, adv. mgr.; Samuel Henken, pur. agt.

UNITED STATES ELECTRICAL TOOL CO., 2488 W. Sixth st., Cincinnati, O. Electric drills, sanders, screw drivers, polishers, flexible shaft machines, bench and floor grinders and buffers. J. C. Smith, pres.; Geo. E. Smith, vice-pres., sales mgr., treas.; C. D. Hogan, secy. Det. Rep. — Albert Fitzpatrick, 2832 E. Gr. blvd. Adv. Agcy.—Julian J. Behr. Co., Cincinnati, O.

UNITED STATES PLYWOOD CORP., 616 W. 46th st., New York, N. Y. Resin-bonded plywood, water-resistant Douglas fir plywood, thin wood veneers mounted on fabric, metal-faced plywood. Lawrence Ottinger, pres.; R. Clay Wilcox, S. W. Antoville, W. C. Bailey, vice-pres.; Simon Ottinger, secy.-treas.; A. D. Madge, comptr.; E. J. Maroney, sales mgr.; L. H. Meyer, adv. mgr. Det. Rep.—United States Plywood Corp., 1815 Franklin st.

U. S. RUBBER CO., 1790 Broadway, New York, N. Y. Rubber goods of all kinds. F. B. Davis jr., chmn., pres.; H. E. Humphreys jr. L. D. Tompkins, Herbert E. Smith, E. J. Coughlin, Elmer Roberts, W. A. Eden, T. J. Needham, vice-pres.; Eric Burkman, secy.; W. H. Blackwell, treas.; Walter Emery, adv. mgr.; G. M. Tisdale, pur. agt. Det. Rep.—R. Emmet Sheahan, 6600 Jefferson ave. Adv. Agency.—Campbell Ewald Co., New York.

(See display advertising index)

USL BATTERY CORP., 3201 Highland ave., Niagara Falls, N. Y. Storage batteries, hose clamps. D. H. Kelly, pres.; H. A. Harvey, vice-pres.; F. H. Landwehr, secy.; W. V. Flood, treas.; W. W. Pennington, mfgs. sales mgr.; W. E. Blank, replace. sales mgr.; A. R. Reid, engr.; J. H. Lambrix, pur. agt. Det. Rep.—W. W. Pennington, 6154 Hamilton ave. Adv. Agcy.—Baldwin & Strachan Inc., 374 Delaware ave., Buffalo, N. Y.

UNITY MFG. CO., 2909 Indiana ave., Chicago, Ill. Automobile driving lights, automobile road lamps. Henry R. Gross, pres., gen. mgr., treas.; Thos. J. Leary, vice-pres, sales mgr.; Martha S. Hubert, secy.; Walter Peterson, engr.; R. K. O'Donnell, pur. agt. Det. Rep.—Harry Burr, 1010 Stephenson Bldg.

UNIVERSAL BATTERY CO., 3410 S. La Salle st., Chicago, Ill. Auto batteries, radio batteries, farm light batteries. Robert D. Mowry, pres., gen. mgr.; Harry I. Holton, secy.; Charles Silberman, treas.; Roy S. Mowry, sales mgr.; Robert D. Mowry, adv. mgr., pur. agt.; R. O. Watkins, engr. Adv. Agcy.—Aubrey, Moore & Wallace, 230 N. Michigan ave., Chicago, Ill.

UNIVERSAL CHEMISTS, 263 Northhampton st., Boston, Mass. Testing gauges, chemicals, research. A. J. White, pres. Adv. Agcy.—Frank Day, Boston, Mass.

UNIVERSAL OIL SEAL CO., Inc., 34 W. Kennett rd., Pontiac, Mich. Oil seals. V. E. Nelson, pres.; A. B. Nelson, vice-pres.; H. E. Hotchkiss, secy.-treas.

UNIVERSAL PRODUCTS, 128-130 Burnet ave., Syracuse, N. Y. Grease guns, air guns, spraying equipment, lubrication equipment. C. J. Nolin, A. R. Nolin, G. M. Polhemus, partners; G. M. Polhemus, gen. and sales mgr.; W. C. Lennie, adv. mgr.; A. R. Nolin, engr., pur. agt. Det. Rep.—V. O. Phillips, 2346 Merrick st., Adv. Agcy.—David Tynion Co. S. A. & K. bldg., Syracuse, N. Y.

(Continued on Next Page)

REYNOLDS SPRING CO.
Founded 1899
manufacturers of
AUTOMOBILE CUSHION
SPRINGS
and
MOLDED PLASTICS
PLANTS IN
JACKSON, MICHIGAN — PASSAIC, NEW JERSEY — CAMBRIDGE, OHIO

Who's Who

(Continued from Previous Page)

UTILITY TRAILER MFG. CO., 3900 Medford st., Los Angeles, Calif. Commercial trailers, trailer and truck bodies, steel castings. E. W. Bennett, pres., gen. mgr.; G. L. Knox, vice-pres., engr.; H. C. Bennett, secy.-treas.; V. D. Waters, pur. agt.

V

VACUUM POWER EQUIPMENT CO., 1644 W. Lafayette blvd., Detroit, Mich. Power brakes for trucks, trailers, cylinders, valves, couplings, bus door openers. Roman J. Zech, pres., gen. mgr.; Edward U. Demmer, vice-pres.; Waller Carson, secy.-treas.

VAGABOND COACH MFG. CO., 509 Grand River ave., New Hudson, Mich. House trailers, horse trailers, trailer windows. F. C. Burt, pres., engr.; Geo. F. Miles, vice-pres., adv. mgr.; P. C. Miles, secy.-treas., sales mgr.; T. F. Gronback, ofc. mgr.; R. E. Jackson, pur. agt. **Detroit Rep.**—Vagabond Coach Sales Co., 3535 Cass ave.

VALENTINE & CO., Inc., 11 East 36th st., New York, N. Y. Lacquer, enamels, synthetic enamel. Thurlow J. Campbell, chmn., pres.; Frank P. Connolly, vice-pres., gen. mgr.; George Bralla, secy.-treas.; P. M. Vosburgh, adv. mgr.; T. J. Fitzgerald, pur. agt. **Det. Rep.**—Russel Rogers, Valentine & Co., 550 12th st. **Adv. Agcy.**—McCann-Erickson, Inc. 285 Madison ave., New York, N. Y.

VALVOLINE OIL CO., 534 W. Fifth St., Cincinnati, O. Lubricating oils and greases. E. W. Edwards, chmn.; G. P. Doll, pres., gen. mgr.; C. J. Leroux, vice-pres., treas.; H. M. Hart, vice-pres.; C. C. Gould, vice-pres., secy.; C. W. Luton, vice-pres.; J. H. Garlough, vice-pres.; J. M. Marshall, vice-pres.; G. L. Service, adv. mgr.; E. H. Shepherd, pur. agt. **Det. Rep.**—J. H. Garlough, 1900 E. Warren st. **Adv. Agcy.**—Keeling & Co., Indianapolis, Ind.

VAN NORMAN MACHINE TOOL CO., 180 Wilbraham ave., Springfield, Mass. Milling machines, radial grinders, boring bars, valve refacers, valve and valve seat reconditioning equipment, piston grinders, brake drum lathes. F. D. Van Norman, chmn., secy.; C. E. Van Norman, pres.; J. Y. Scott, exec. vice-pres., treas.; L. F. Hunderup, asst. gen. mgr.; F. P. Healy, automotive engr.; R. S. Pyne, mach. tool engr.; J. Y. Scott, gen. mgr.; H. G. Hoglund, sales mgr. mach. tool div.; L. F. Hunderup, sales mgr. automotive div.; T. W. Baush, adv. and export mgr.; Homer Bordeaux, engr.; C. A. Thompson, pur. agt. **Det. Rep.**—J. E. Giffin, 4605 Arlington ave., Ft. Wayne, Ind. **Adv. Agcy.**—Sutherland Abbot Co., 234 Clarendon st., Boston, Mass.

VAN CLEEF BROS., 7800 S. Woodlawn ave., Chicago, Ill. Friction tape, rubber tape, frost shield tape, pres-tape, masking tape, patch outfits, autobody and trim cement, running-board cement, top and roof moulding cement, cork and rubber packing for window channels, hydraulic brake fluid, shock absorber and knee action fluid, gasket shellac compound, brake lining cement, bearing blue, rubber aprons, motor graphite. Noah Van Cleef, Felix Van Cleef and Paul Van Cleef, partners; Felix Van Cleef, sales mgr.; H. D. Wexelberg, adv. mgr.; C. E. Wonder, pur. agt.; S. Overstraeten, export mgr.; C. E. Frick, chief chemist. **Det. Rep.**—H. G. Goble, 5038 Hillsboro. **Adv. Agcy.**—Behel & Waldie, Daily News Plaza, Chicago, Ill.

VALV-TITE PISTON RING CO., 1701 Spielbusch ave., Toledo, O. Cast iron oil rings, piston rings, compression rings. Albert P. Fall, pres., gen. mgr.; L. N. Bardol, vice-pres.; Chas. Weirich, secy.; Harry Henning, treas.; Emory A. Fall, sales mgr.; R. M. Hillard, adv. mgr.; Albert P. Fall, pur. agt. **Adv. Agcy.**—Bradford Co., 1220 Madison ave., Toledo, O.

VEIT CO., 1947 E. Kirby st., Detroit, Mich. Dealer's follow-up systems, filing equipment and supplies, indexing devices and systems, portfolios and loose leaf products. Conrad Veit, pres.; Robert C. Veit, gen. mgr.

VELLUMOID CO. 54 Rockdale st., Worcester, Mass. All types non-metallic gaskets and fibre sheet packing. Richard B. Stanley, pres.; Richard D. Seamns, vice-pres.; Geo. C. Beals, secy.-treas., gen. mgr.; W. W. Webster, asst. treas.; Charles S. Livingstone, sales mgr.; Lewis Wald, pur. agt.; James Crothers, mgr. Det. plant; **Det. Rep.**—Thos. F. McGuane jr., 105 Scotten ave. **Adv. Agcy.**—Smith & Ordway, 530 Atlantic ave., Boston, Mass.

VICTOR INSTRUMENT MFG. CO., Inc., 33 W. 60th st., New York, N. Y. Battery hydrometers, battery fillers, battery clips, freezmeters, battery shims, air line accessories, battery jumpers. Wm. G. Amdur, pres. **Det. Rep.**—M. L. Berman, 2722 Webb ave.

VICTOR MFG. & GASKET CO., 5750 Roosevelt rd., Chicago, Ill. All types of gaskets, grease retainers, metal stampings, and packings. J. H. Victor, pres.; J. B. Victor, vice-pres.; A. A. Frymark, vice-pres., gen. mgr.; C. C. Secrist, secy., sales mgr.; G. McAninch, treas.; M. L. Liston, adv. mgr.; D. L. Derrom, engr., works mgr.; O. W. Clifton, pur. agt. **Det. Rep.**—C. B. Russell, 4-132 General Motors bldg. **Adv. Agcy.**—George Hartman & Co., 307 N. Michigan ave., Chicago, Ill.

VILLARD TRUCK SIGNAL MFG. CO., 200 Turpin st., Rochester, N. Y. Truck and bus illuminated signals, semaphore signals, highway reflectors. J. J. Villard, pres., pur. agt.; F. H. Young, vice-pres.; Wm. A. M. Villard, secy.; P. G. Kelley, gen. mgr.; H. B. Barnard, sales mgr.; L. L. Villard, engr.

VISCO-METER CORP., 315 Grote st., Buffalo, N. Y. Visco-Meter—an oil viscosity indicating device. W. A. Clare, pres.; C. D. Jones, vice-pres.; Karl A. McCormick, secy.; Robert Donner, treas.; I. Q. Baird, sales mgr.; A. E. Miller, engr. **Adv. Agcy.**—Moss Chase Co., 425 Franklin st., Buffalo, N. Y.

VLCHEK TOOL CO., 3001 E. 87th st., Cleveland, O. Wrenches, pliers, screw drivers, chisels, punches, hammers and tool kits, etc. F. J. Vlchek, pres., gen. mgr.; E. C. Koster, vice-pres.; D. B. Wilson, secy., adv. mgr.; H. F. Vlchek, treas.; E. Krall, sales mgr.; R. Miniark, engr.; F. Tkach, pur. agt. **Det. Rep.**—H. B. Kendal & Co., 63 W. Milwaukee ave. **Adv. Agcy.**—The Bayless-Kerr Co., Hanna bldg., Cleveland, O.

VULCAN MFG. CO., Inc., Wabasha at Channel, St. Paul, Minn. Hydraulic bumper jacks, air cleaner service unit, hydraulic pit jacks. R. E. Lange, pres., gen. mgr.; Stanley Gates, vice-pres.; J. L. Hughes, secy.-treas.; L. D. Nilson, engr.; K. A. Relf, pur. agt. **Det. Rep.**—Irving A. Hecht, 2214 S. Michigan ave., Chicago, Ill. **Adv. Agcy.**—Mitchell Advertising Agency., 301 Essex bldg., Minneapolis, Minn.

VULCAN PRODUCTS, 26 Ave. L, Newark, N. J. Brake drums, wheels (cast) for truck, trailers, buses, slack adjustors (for power brakes). C. G. Keller, pres.

W

WAGNER ELECTRIC CORP., 6400 Plymouth ave., St. Louis, Mo. Hydraulic brakes and parts, hydraulic brake norol or hill holder. P. B. Postlethwaite, pres.; A. H. Timmerman, vice-pres., engr.; E. H. Cheney, vice-pres.; J. W. Westcott, secy.; V. W. Bergenthal, treas.; F. F. Simon, contr.; E. H. Cheney, sales mgr. std. lines; J. A. Gelzer, sales mgr., brakes; C. B. Dietrich, adv. mgr.; J. D. Eby, pur. agt.; G. A. Waters, ch. engr. stad. lines; Burns Dick, ch. engr., brakes. **Det. Reps.**—R. L. Wells, standard lines; J. W. Bryant jr., brakes, 6050 Cass ave. **Adv. Agcy.** — A. R. Mogge, Inc., 307 N. Michigan, Chicago, Ill.
(See display advertising index)

WAGNER, E. R., MFG. CO., 4611 N. 32nd st., Milwaukee, Wis. Bushings, cowl ventilators, seat adjusters, stampings. E. R. Wagner, pres.; D. W. Tietjen, vice-pres.; C. F. Garny, secy.; G. H. White, treas.

WALKER & CO., 88 Custer ave., Detroit, Mich. Neon and electric signs. J. O. Murfin, chmn.; C. D. Blessed, pres. and gen. mgr.; G. V. Brandt, vice-pres.; T. F. Wolcott, vice-pres.; L. A. Kremer, secy.; E. P. Bayne, treas.; A. M. Smith and W. R. Hoskins, sales mgrs.; J. M. Jones, adv. mgr.; E. C. Bolton, engr.; H. C. Johnson, pur. agt.

WALKER MFG. CO., 1201 Michigan blvd., Racine, Wis. Jacks, lifts, exhaust silencers, starting cranks and tire pumps. W. T. Walker, pres., treas.; J. S. Allan, W. H. Walker, J. S. Wise, vice-pres.; Malcolm McCormick, vice-pres., sales mgr.; M. H. Lundberg, secy.; T. F. Hall, adv. mgr.; Earl Gunn, engr.; C. C. Nelson, pur. agt. **Det. Rep.**—Walker Mfg. Co., 311-B Stormfeltz - Lovelcy bldg. **Adv. Agcy.**—Keeling & Co., Chamber of Commerce bldg., Indianapolis, Ind.

WALKER VEHICLE CO., Div. of Yale & Towne Mfg. Co., 101 W. 87th st., Chicago, Ill. Electric street trucks and tractors, dynamotive trucks, tractors. W. Gibson Carey, Jr., pres.; J. A. Horne, vice-pres.; F. Dunning, treas.; E. F. Twyman, gen'l mgr.; George Walton, sales mgr.; E. R. Pritchard, engr.; R. H. Chapman, pur. agt.

WALLACE, J. D., & CO., 134 S. California ave., Chicago, Ill. Woodworking machinery, universal saws, jointers, radial saws, band saws, shapers, lathes, drills. J. D. Wallace, pres. and gen. mgr.; R. J. Reiser, vice-pres.; R. A. Ness, adv. mgr.; C. H. Landis, pur. agt. and secy. **Det. Rep.**—C. M. Blanke, 4545 Beniteau st.

WALTHAM WATCH CO., Crescent st., Waltham, Mass. Speedometers, tachometers, precision parts. I. E. Boucher, gen. mgr.; E. C. Foster, pur. agt. **Det. Rep.**—C. J. Edwards, Fisher bldg. **Adv. Agcy.**—Geo. H. Moses, Inc., 199 Washington st., Boston, Mass.

WARD PLASTIC AND RUBBER CO., 807 Murphy bldg., Highland Park, Mich. Small and large rubber and plastic parts. W. B. Rowen, pres., treas.; Eino Trump, gen. mgr. **Adv. Agcy.**—Rickerd Mulderger and Hicks, Inc., Detroit, Mich.

WARFORD CORP., 44 Whitehall st., New York, N. Y. Multi-wheelers for Ford and Chevrolet trucks, and auxiliary transmissions. **Adv. Agcy.**—Wibel Advertising Service, 45 E. 17th st., New York, N. Y.

WARNER ELECTRIC BRAKE MFG. CO., 449 Gardner st., Beloit, Wis. Electric power brakes. P. J. E. Wood, pres., treas.; R. E. Freeman, vice-pres.; M. Divine, secy., pur. agt.; William J. Dunn, gen. mgr.; H. L. Fleming, sales mgr.; Frank G. Born, engr. **Det. Rep.**—John A. Schroeder, 3087 W. Grand blvd. **Adv. Agcy.**—Klau-Van Pietersom-Dunlap Assoc., Milwaukee, Wis.

WARNER GEAR DIV., Borg - Warner Corp., 1106 E. Seymour st., Muncie, Ind. Automotive transmissions, synchronizers, overdrive units. C. S. Davis, pres.; J. M. Simpson, vice-pres., gen. mgr.; E. B. Baltzly, G. W. Bunner, vice-pres.; G. A. Shallberg, secy.; W. M. Clark, treas.; S. O. White, engr.; L. A. Black, pur. agt. **Det. Rep.**—J. G. Monjar, 4-146 General Motors bldg.

WARNER MACHINE PRODUCTS, Inc., 1200 Rochester ave., Muncie, Ind. Water pumps, pulleys, production machinings. C. S. Davis, pres.; A. L. Johnson, vice-pres. and gen. mgr.; E. F. Ball, vice-pres.; M. M. Smith, secy.; K. A. Oesterle, treas.

WARNER-PATTERSON CO., 920 S. Michigan ave., Chicago, Ill. Liquid solder, radiator cleaner, Warner cooling system protector. A. P. Warner, pres.; M. J. Phillips, vice-pres.; J. H. Cattell, secy.-treas., gen. and adv. mgr.; H. H. Allyn, sales mgr.; V. L. Stone, engr.; B. A. Gollan, pur. agt. **Det. Rep.**—C. V. Grantello, 11835 Lake ave., Lakewood, O. **Adv. Agcy.**—George Hartman Adv. Co., 307 N. Michigan ave., Chicago, Ill.

WASHBURN CO., 28 Union st., Worcester, Mass. Spring lock washers, screwdrivers. Reginald Washburn, pres.; John Tomajan, vice-pres.; Nelson Hood, secy.-treas.; E. H. Gorton, sales mgr.; Robert G. Hess, engr.; John Prouty, pur. agt.

WATERVLIET TOOL CO., Inc., 1039 Broadway, Albany, N. Y. Reamers, high speed pneumatic vibrators, pneumatic piston resizer, expansion lubricated hinge pins, hood props. William J. Kattrein, pres. and treas.; H. J. Funk, vice-pres.; A. M. Kattrein, secy.; H. J. V. Conners, gen. mgr.; T. Ten Eyck, sales mgr. and pur. agt.; R. Kinsley, engr. **Det. Rep.**—W. F. Beckley, 17302 Pendington dr. **Adv. Agcy.**—De Rouville Advertising Agency, 11 N. Pearl st., Albany, N. Y.

WATSON, JOHN WARREN, CO., Bridge st., and P. R. R., Philadelphia, Pa. Silenite. John W. Watson, pres.; R. A. Watson, secy.-treas.

WATSON, REX, CORP., Center st., Canastota, N. Y. School buses, city service coaches and special coaches of all types. R. H. Imhofe, chmn., pres. and treas.; J. Rogers, secy.; Joseph Sliker, asst. treas. and auditor; E. W. Winegard, gen. and sales mgr.; L. S. Cornell, adv. mgr.; Paul Krouse, engr. and pur. agt.

WAUKESHA MOTOR CO., Waukesha, Wis. Internal combustion engines, gas, gasoline, oil, diesel and motor coach air conditioning equipment. J. E. DeLong, pres.; J. B. Fisher, vice-pres., chief engr.; H. E. Frame, secy.; E. R. Estberg, treas.; J. G. Swain, sales mgr.; P. C. Ritchie, adv. mgr.; C. E. Nelson jr., pur. agt. **Det. Rep.**—F. W. Gargett, Rt. 4, Mt. Clemens, Mich. **Adv. Agcy.** — Cramer-Krasselt Co., 733 N. VanBuren st., Milwaukee, Wis.

WAUSAU MOTOR PARTS CO., 1007-15 Harrison blvd., Wausau, Wis. Piston rings. W. R. Scholfield, pres.; E. K. Schuetz, vice-pres.; W. C. Landon, gen. mgr. and secy.-treas. **Det. Rep.**—Harry B. Burr, 1010 Stephenson bldg.

WAYNE PUMP CO., Ft. Wayne, Ind. Gasoline pumps, air compressors, auto lifts, car washers, bulk plant pumps and meters. B. F. Geyer, pres.; W. F. Brandt, vice-pres. of mfg.; E. A. Zern, vice-pres. of finance; E. J. Gallmeyer, vice-pres. of sales; C. G. Guild, secy.; E. A. Zern, treas.; A. H. Dickmeyer, adv. mgr.; R. J. Jauch, engr.; H. Buehler, pur. agt. **Det. Rep.**—V. C. Christie, 915 Holden ave. **Adv. Agcy.**—Bonsib, Inc., Ft. Wayne, Ind.

WEATHERHEAD CO., 300 E. 131st st., Cleveland, O. Brake fittings, brake hose, chokes, brass tube fittings, drain cocks, flaring tools, fuel line assemblies, grease hose, shutoff cocks. A. J. Weatherhead jr., pres., sales mgr.; E. L. Ferguson, treas.; R. H. Weatherhead, adv. mgr.; C. H. Crawley, engr.; C. T. Craig, pur. agt. **Det. Rep.**—R. P. Gibson, 704 Fisher bldg. **Adv. Agcy.**—Howard Meermans, 3030 Euclid ave., Cleveland, O.

WEAVER MFG. CO., Springfield, Ill. Garage equipment, headlight testers, brake testers, alignment indicators, wheel alignment outfits, jacks, lifts, air compressors, tire service equipment, towing equipment, etc. I. A. Weaver, pres.; G. E. Weaver, vice-pres., treas.; C. F. Hodgson, secy., sales mgr.; E. A. Costa, gen. mgr.; W. A. Weld, adv. mgr.; A. R. Squyer, engr.; O. W. Ellis, pur. agt. **Adv. Agcy.**—Arthur R. Mogge, Inc., Chicago, Ill.

WEDLER-SHUFORD CO., 2222 Olive st., St. Louis, Mo. Nail hole tire plugs, tire white, tire black, sun helmets. Harry G. Wedler, chmn. and gen. mgr.; M. R. Wedler, vice-pres.; Chas. Zwibleman, secy. **Adv. Agcy.**—Beecher Adv. Co., 17th and Olive st., St. Louis, Mo.

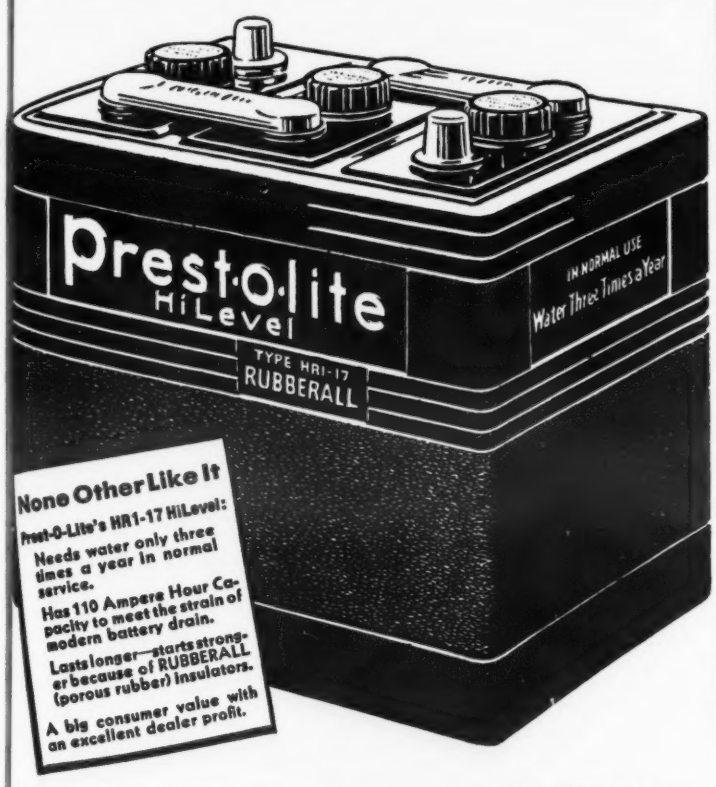
WEIDENHOFF, JOSEPH, Inc., 4340-58 W. Roosevelt rd., Chicago, Ill. Motor analyzers, generator test benches, battery charging rectifiers, magnetometer, rectifier tube, vacuum pumps, timing lights, and testers of all types. L. V. Jenkins, chmn. and secy.; Earl N. Webber, pres. and gen. mgr.; Joseph Weidenhoff, vice-pres.; J. A. Fick, treas.; R. P. Kimmey, sales and adv. mgr.; W. H. Yenni, engr.; J. P. O'Brien, pur. agt. **Det. Rep.**—John Weber, 5249 Wayburn ave.

WEIRTON STEEL CO., Div. of National Steel Corp., Weirton, W. Va. Hot and cold rolled strip steel and rolled sheets, galvanized sheets, tin plate, tin mill black plate, angles, beams, channels, round bars, square bars, flat bars, copper bearing terne plate and plates. T. E. Millsop, pres.; W. R. Cunnick, J. A. Henry and F. A. Hanlin, vice-pres.; W. A. Murphy, secy.; R. L. James, treas.; E. H. Kern, pur. agt. **Det. Rep.**—W. R. Cunnick, 11-210 to 213 General Motors bldg.

WEL-EVER PISTON RING CO., 1701 Spielbusch ave., Toledo, O. Sectional rings, oil control rings, speed compression rings, multi-compression rings. Albert P. Fall, pres. and gen. mgr.; L. N. Bardol, vice-pres.; Chas. Weirich, secy.; Harry Henning, treas.; Emory A. Fall, sales mgr.; R. M. Hillard, adv. mgr. **Adv. Agcy.**—Bradford Co., 1220 Madison ave., Toledo, O.

WENDELL MFG. CO., 2535 N. Ashland ave., Chicago, Ill. Paint shop equipment, paint striping tools. L. W. Coombs, sales and adv. mgr.

(Continued on Next Page)



Make This a Real Battery Profit Year

This year, more than ever before, sales come easier for Prest-O-Lite dealers because the product with the most sales points is the easiest one to sell.

If you'd like to "sit in" on some real *net* battery profits, write us for complete details of Prest-O-Lite's proposition.

Prest-O-Lite

The Battery with Nine Lives

PREST-O-LITE BATTERY COMPANY, INC.

Oakland, California INDIANAPOLIS, IND. Toronto, Canada

Engineering Memo

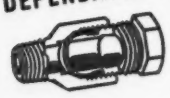
DEPENDABLE Dole THERMOSTATS

The Dole Line of Automotive Thermostats includes models for motor block and hose line installation... both Poppet and Butterfly Types ... with and without nipples for hot water heater connection. All models assure reliable automatic control of engine temperature under varying road, load and weather conditions...are proof against leak, seepage and wear.

DEPENDABLE THERMOSTATIC BI-METAL

Dole Thermostatic Bi-Metal ... made to exacting specifications by time-tried procedures that assure complete uniformity of quality ... can be purchased in (1) Sheets up to 14 inches wide; (2) Strips any width; (3) Coils, as long as 1,000 feet; (4) in diversified fabricated parts such as spiral or helical coils, hairpin or U-shapes, flat strips, etc.

DEPENDABLE Dole FITTINGS *and Special Parts*



Compression couplings for all tubing connections and a complete assortment of water line and hose parts for automobile hot water heaters ... all built and factory tested to withstand severe vibration and strain. Also special brass parts from customer's blueprints ... to his specifications.

THE DOLE VALVE COMPANY
1901-1941 CARROL AVENUE CHICAGO, ILLINOIS
DETROIT OFFICE: GENERAL MOTORS BUILDING

DOLE

THERMOSTATS and BI-METAL

Who's Who

(Continued from Previous Page)

WEST BEND EQUIPMENT CORP., 208 S. Water st., West Bend, Wis. Spring bearing floor trucks, special trucks, portable elevators, stackers, lifters or tiering machines, storage and barrel racks, lift trucks and skid platforms. A. H. Klumb, pres. and gen. mgr.; M. F. Walter, vice-pres.; C. E. Klumb, engr. and secy. **Det. Rep.**—Brown-Darnell Co., 1046 Holden ave. **Adv. Agcy.**—Morrison Adv. Agcy., 1324 W. Wisconsin ave., Milwaukee, Wis.

WESTERN AUTOMATIC MACHINE SCREW CO., Foster and Lake aves., Elyria, O. Cap, set and socket screws, studs, nuts, taper pins, pipe plugs, special screw machine products. B. C. Franklin, vice-pres. and gen. mgr.; C. H. Smith, treas.; R. D. Oldfield, sales mgr.; W. J. Cox, adv. mgr.; R. A. Green, engr. and secy.; F. H. Bryant, pur. agt.; A. B. Cochrane, plant supt. **Det. Rep.**—D. H. Bryant, J. G. Wagner and R. S. Hoot, 1477 Atwater st., E.

WESTERN CHAIN PRODUCTS CO., 1807 Belmont ave., Chicago, Ill. Tire chains and towing chains, safety chains, etc. A. W. Hill, pres. and gen. mgr.; S. Levy, secy.; H. Levy, treas.; C. J. Colling, sales mgr.; Ross Llewelyn, adv. mgr.; B. Drexler, pur. agt. **Adv. Agcy.**—Ross Llewelyn, Midland bldg., Chicago, Ill.

WESTERN FELT WORKS, 4029 Ogden ave., Chicago, Ill. Felt parts of all kinds for automotive use. Henry Faurot, pres.; Henry Faurot, Jr., vice-pres.; W. S. Faurot, treas.; J. A. Hessler, sales mgr. and secy. **Det. Rep.**—Western Felt Works, 419-420 Stephenson bldg. **Adv. Agcy.**—Aubrey, Moore & Wallace, Chicago, Ill.

WESTERN UNION TELEGRAPH CO., 60 Hudson st., New York, N. Y. Telegraph and cable services. Newcomb Carlton, chmn.; Roy B. White, pres.; J. C. Willever, 1st vice-pres.; E. Y. Gallaher and J. J. Welch, vice-pres.; Lewis McKisick, vice-pres. and secy.; G. K. Huntington, treas.; A. K. Mitchell, sales mgr.; H. L. Hamilton, adv. mgr.; F. E. d'Humy, engr.; C. S. Voorhees, pur. agt. **Det. Rep.**—E. C. Bowen, supt., Congress and Shelby sts.

WESTINGHOUSE LAMP DIV., Westinghouse Elec. Mfg. Co., 150 Broadway, New York, N. Y. Mazda lamps, bulbs, etc. A. W. Robertson, chmn.; G. Boucher, pres.; D. S. Youngholm, vice-pres.; A. E. Snyder, sales mgr.; J. F. O'Brien, adv. mgr.; A. Clohosey, pur. agt. **Det. Rep.**—F. H. Neiman, 5757 Trumbull ave. **Adv. Agcy.**—Fuller, Smith & Ross, 444 Madison ave., New York, N. Y.

WHEEL SERVICE EQUIPMENT CORP., 407-409 E. Fort st., Detroit, Mich. Wheel straightening press and equipment, hub and drum straightening equipment, hub and drum riveting equipment. E. Connor, pres. and engr.; F. A. Tripp, vice-pres., gen. mgr.; G. Muth, secy.-treas.

WHITAKER BATTERY SUPPLY CO., 1301-15 Burlington ave., North Kansas City, Mo. Automotive cable products, service tools, ignition terminals, battery terminals, etc. J. P. Whitaker, pres. and gen. mgr.; V. W. Brewer, vice-pres. and sales mgr.; Leo Bellman and T. H. Voelker, vice-pres.; T. H. Stuver, pur. agt. and secy. **Adv. Agcy.**—Arthur R. Mogge, 307 N. Michigan ave., Chicago, Ill.

WHITE, J. M., 1116 to 1134 Olive st., Philadelphia, Pa. Insulated copper wire, cables, wiring harnesses, battery cables, terminals.

WHITE MOTOR CO., 842 E. 79th st., Cleveland, O. White and Indiana trucks and buses. Robert F. Black, pres.; J. N. Bauman, vice-pres., sales mgr.; Frank Bender, vice-pres., gen. mgr.; Fred Macrae, vice-pres.; Robert Lee, treas.; J. L. Bourke, asst. adv. mgr.; F. S. Baster, engr.; J. E. Dunbar, pur. agt. **Det. Rep.**—Earl Grandel. **Adv. Agcy.** — D'Arcy, St. Louis, Mo.

WHITEHEAD & KALES CO., 58 Haltiner st., River Rouge, Mich. Trailers, misc. fabricated steel products. Wm. R. Kales, pres.; Neil C. McMath, vice-pres.; Leo J. Knapp, secy.; J. Rodney Weeks, treas.; C. Wyman, pur. agt.

WHITEHEAD STAMPING CO., 1661 W. Lafayette blvd., Detroit, Mich. Sheet metal stampings and specialties, standard and special washers, hindview mirrors. J. F. Whitehead, pres.; Geo. W. Schreck, secy.

WHITMORE MFG. CO., Iron Court and Erie R. R., Cleveland, O. Pressure-proof lubricants. William Beaser, pres.; Wm. M. Durkin, vice-pres.; C. B. Benner, secy.; W. H. Whitmore, treas. **Det. Rep.**—Wm. M. Durkin, Fort Shelby Hotel.

WHITNEY CHAIN & MFG. CO., 237 Hamilton st., Hartford, Conn. Automotive timing chains and sprockets, industrial roller and silent chain drives, conveyor chain, flexible couplings. R. T. Stevens, chmn.; W. H. Whitney, pres.; C. A. Gray, vice-pres.; P. C. Boyd, secy.; B. F. Tolles, pur. agt. **Det. Rep.**—R. A. Follensby, 2-240 General Motors bldg. **Adv. Agcy.**—Sutherland-Abbott, Boston, Mass.

WICKES BROTHERS, 512 N. Water st., Saginaw, Mich. Engine and crankshaft lathes, plate bending rolls, angle bending rolls, wall radial drills, flanging clamps, blue print machines, special machinery. H. R. Wickes, chmn. and gen. mgr.; E. B. Wickes, vice-pres.; F. H. Payne, secy.; Carl Bintz, sales and adv. mgr.; F. S. Floeter, engr.

WICKWIRE SPENCER STEEL CO., 41 E. 42nd st., New York, N. Y. Starter springs. E. C. Bowers, pres.; P. M. Macklin, vice-pres.; G. H. Creveling, treas.; R. L. Foster, gen. sales mgr.; E. J. Byrnes, sales mgr.; K. A. Zollner, adv. mgr.; F. C. Yeates, pur. agt. **Det. Rep.**—C. O. Spillman, 6432 Cass ave. **Adv. Agcy.**—E. M. Freystadt Associates, Inc., 570 Lexington ave., New York, N. Y.

WIESE, WM. & CO., Inc., 234 W. 56th st., New York, N. Y. Upholstery cloths. Wm. Wiese, pres.; C. A. Wiese, vice-pres. and gen. mgr.; M. V. Wiese, secy. **Det. Rep.**—Getsinger-Fox Co., 302 Stephenson bldg.

WILDING PICTURE PRODUCTIONS, Inc., 7635 Grand River, Detroit, Mich. Sound motion pictures and sound slide films. N. E. Wilding, pres.; H. W. Fish, vice-pres.; R. D. L. Fleming, secy.-treas.; J. M. Constable, prod. mgr.; J. A. Kellock, plant mgr.; W. I. Irvine, sales mgr.; W. E. Dietz, adv. mgr.; H. B. Casenhiser, pur. agt.

WILKENING MFG. CO., 2000 S. 71st st., Philadelphia, Pa. Piston expanding machine, piston rings, valve stem packing, piston ring compressors, skirt expander, groove tools, gauges, ring skids. Fred W. Wilkening, pres. and gen. mgr.; George L. Briggs, exec. vice-pres.; Henry E. Gerstley, treas.; Earl C. Chatfield, sales mgr.; Walter A. Kirkpatrick, adv. mgr.; Paul E. Friend, engr.; Francis Solis-Cohen, pur. agt. **Det. Rep.**—Warren K. Lee, Lexington bldg. **Adv. Agcy.**—Behel & Waldie, Daily News Plaza, Chicago, Ill.

WILLARD STORAGE BATTERY CO., 246 E. 131st st., Cleveland, O. Batteries. S. W. Rolph, vice-pres., gen. mgr.; C. H. Gibney, vice-pres., secy.; R. J. Nightingale, vice-pres.; I. K. Schnaitter, treas.; S. E. Baldwin, dir. of merch.; F. G. Teufel, sales mgr.; B. A. Broughton, adv. mgr.; L. E. Wells, engr.; F. L. Kulow, pur. agt. **Det. Rep.**—E. B. Reeser and M. J. Brennan, 5946 Cass ave. **Adv. Agcy.** — Meldrum & Fewsmith, Inc., Leader bldg., Cleveland, O.

WILLIAMS, J. H. & CO., 400 Vulcan st., Buffalo, N. Y. Special drop-forgings to order, standard stock lines of tools. J. C. Scanlon, Buffalo, N. Y., spcl. frgs.; E. J. Wilcox, New York, N. Y., stock products, sales mgrs. **Det. Rep.**—Victor E. Nagle, 17304 Monica ave.

WILLOUGHBY CO., Dwyer ave., Utica, N. Y. Custom and semi-production automobile bodies. Francis D. Willoughby, pres. and gen. mgr.; D. C. Willoughby, vice-pres.; Jas. F. Hubbell, secy.-treas.; M. Regitko, engr.; Wm. E. Langdon, pur. agt.

WILLYS-OVERLAND MOTORS, Inc., Wolcott blvd., Toledo, O. Automobiles and commercial units. Ward M. Canaday, chmn.; David R. Wilson, pres.; W. C. Cowling, vice-pres.; Delmar G. Roos, vice-pres., chief engr.; George W. Ritter, secy., counsel; F. F. Kishline, engr.; George Bancroft, pur. agt. **Adv. Agcy.**—United States Adv. Corp., Home Bank bldg., Toledo, O.

(See display advertising index)

WILSON BODY CO., 613-15 Water, Sioux City, Ia. Semi-trailers, refrigerator and van bodies. F. T. Wilson, pres.; C. A. Persinger, secy.-treas.; Leo A. Chartier, engr.

WILSON, H. A., CO., 105 Chestnut st., Newark, N. J. Refiners and workers of precious metal, thermostatic metals, alloy contact points. H. A. Wilson, pres.; F. B. Fry, vice-pres.; F. O. Williams, secy.; A. R. Rohr, sales mgr. electrical dept.; H. Herrman, sales mgr. thermo or bimetal; R. Waltenberg, engr.; F. E. Matzenbacher, pur. agt. and asst. treas. **Det. Rep.**—M. Ward, 422 Center bldg.

WILSON, K. R. 10 Lock st., Buffalo, N. Y. Garage equipment. K. R. Wilson, owner; A. H. Drummond, sales and pur agt.;

(Continued on Page 94)

Your Inquiries Invited
on
Automotive Securities

Wm. C. Roney & Co.

Members of Detroit Stock Exchange
2232 Union Guardian Building
Detroit, Michigan
Cherry 6700

Branches:
Pontiac, Saginaw, Bay City, Grand Rapids,
Wyandotte, Port Huron

Financial Structure Automotive Industry

CAR AND TRUCK COMPANIES

	Shares Com. Stock Outstanding	Market Value July 23, 1938	Shares Pref. Stock Outstanding	Par Value Pref.	Funded Debt Dec. 31, 1937
Auburn	228,237	$ 1,027,000	None		$1,809,000
Chrysler	4,351,132	318,720,000	None		None
Diamond T	421,259	4,002,000	None		None
Federal Motor	491,543	2,212,000	None		None
Ford of Canada	1,658,960	33,179,000	None		None
General Motors	42,920,185	1,867,018,000	1,875,366	None	None
Graham-Paige	2,966,281	3,708,000	4,706	$100	754,500
Hudson	1,588,810	15,094,000	None		2,898,000
Mack Trucks	597,335	16,725,000	None		None
Nash-Kelvinator	4,263,398	46,800,000	None		None
Packard	15,000,000	82,500,000	None		None
Reo	1,800,000	4,500,000	None		None
Studebaker	2,199,395	15,300,000	None		6,762,746
White	625,000	9,063,000	None		None
Willys-Overland	2,046,229	5,382,000	320,778	10	None
Yellow Truck & Coach	2,999,985	61,500,000	143,980	100	None

PARTS AND ACCESSORY COMPANIES

	Shares Com. Stock Outstanding	Market Value July 23, 1938	Shares Pref. Stock Outstanding	Par Value Pref.	Funded Debt Dec. 31, 1937
Bendix	2,097,663	$ 39,500,000	None		None
Bohn Aluminum	352,418	9,692,000	None		None
Borg-Warner	2,302,030	72,816,000	None		None
Briggs	1,979,000	62,596,000	None		None
Briggs & Stratton	297,149	10,698,000	None		None
E. G. Budd	1,656,808	10,570,000	59,531	$100	$3,432,000
Budd Wheel	965,258	4,947,000	4,950	100	None
Collins & Aikman	562,800	18,391,000	47,414	100	None
Eaton	703,646	14,425,000	None		None
Electric Auto-Lite	1,202,545	32,770,000	None		10,000,000
Houdaille-Hershey	785,056	12,168,000	174,000	None	None
Midland Steel	234,915	6,578,000	1st 94,925	100	None
			57,900	None	None
Motor Products	391,254	8,314.000	None		None
Motor Wheel	850,000	11,156,000	None		None
Mullins Mfg.	546,050	4,095,000	28,775	None	None
Murray Corp.	950,615	9,031,000	None		None
Perfect Circle	161,696	4.042,000	None		None
Raybestos-Manhattan	632,500	14,568,000	None		None
Reynolds Spring	290.000	4,350,000	None		403,463
Spicer	300,000	4,725,000	70,000	None	None
Stewart-Warner	1,241.847	13,660.000	None		None
Thompson Products	293,290	4,986,000	9,288	None	None
Timken-Detroit	984,150	5,413.000	21,576	100	None
Timken Roller Bearing	2,411,380	119,363,000	None		None
Trico Products	654,000	22,236.000	None		None
L. A. Young Spring & Wire	408,658	8,990,000	None		None

TIRE AND RUBBER COMPANIES

	Shares Com. Stock Outstanding	Market Value July 23, 1938	Shares Pref. Stock Outstanding	Par Value Pref.	Funded Debt Dec. 31, 1937
Firestone	1,941.303	$44,650,000	466,134	$100	$13,300,000*
Fisk	439.928	3,300,000	35,297	100	None
General T. & R.	517,947	7,900,000	26,715	100	None
B. F. Goodrich	1,303,255	28,346,000	412.031	None	46,122,268
Goodyear	2.059.061	57,654.000	650,468	None	52,550,262
U. S. Rubber	1,536,101	69,893,000	651,091	100	50,800,000

*Subsidiary companies.

MISCELLANEOUS COMPANIES

	Shares Com. Stock Outstanding	Market Value July 23, 1938	Shares Pref. Stock Outstanding	Par Value Pref.	Funded Debt Dec. 31, 1937
American Chain	987,436	$21,724.000	57,384	$100	None
Cleveland Graphite-Bronze	921,920	23,740.000	None		None
Continental Motors	2,443,552	3,665,000	None		$974,950
Electric Storage Battery	906.554	27,197,000	1,256	25	None
Evans Products	244,191	3,415.000	None		None
Hercules Motor	311,000	5,210.000	None		None
Waukesha Motors	400,000	7,500,000	None		None

Current Financial Position of Automotive Manufacturing Companies, 1937-1938

(From Latest Available Balance Sheets)

Car and Truck Companies

	Cash or Equivalent Latest	Cash or Equivalent Year Ago	Current Assets Latest	Current Assets Year Ago	Current Liabilities Latest	Current Liabilities Year Ago	Ratio Assets to Latest Liabilities
Auburn	$ 76,521	$969,000	$ 740,412	$ 3,599,000	$ 845,000	$ 1,003,000	0.9-1
Chrysler	73,190.000	85,495,000	105,188,000	151,101,000	24,367,000	63,311,000	4.4-1
Diamond T	553,000	378,000	2,893,000	2,577,000	1,057,000	1,384,000	2.7-1
Federal Motor	450,000	701,000	2,601,000	2,600,000	379,000	421,000	6.9-1
Ford of Canada	10,259,000	12,800,000	23,637,000	25,011,000	6,385,000	4,694,000	2.9-1
General Motors	242,991,000	261,795,000	470,372.000	592,147,000	118,419,000	184,162,000	4 -1
Graham-Paige	130,000	608,000	2,298,000	2,504,000	3,106,000	3,746,000	0.7-1
Hudson	9,538,000	12,037,000	17,558,000	21,774,000	4,282,000	9,794,000	4.1-1
Mack Trucks	2.626,000	2,257,000	26,808,000	27.982,000	3,327,000	5,566,000	8.1-1
Packard	6,375,000	15,936,000	23,894,000	29,792,000	7,430,000	11,543,000	3.2-1
Reo	719,000	1,422,000	5,670,000	6,535,000	1,267,000	1,247,000	4.5-1
Studebaker	4,031,000	7,130,000	14,479,000	16,393,000	3,270,000	5,271,000	4.4-1
White	1,020,000	2,187,000	17,220,000	15,945,000	4,464,000	2,733,000	3.9-1
Willys-Overland	1,188,000	1,136,000	4,277,000	3,674,000	886,000	1,591,000	4.8-1
Yellow Truck & Cab	1,338,000	8,251,000	29,936,000	30,114,000	8,155,000	7,442,000	3.7-1

Parts and Accessory Companies

	Cash or Equivalent Latest	Cash or Equivalent Year Ago	Current Assets Latest	Current Assets Year Ago	Current Liabilities Latest	Current Liabilities Year Ago	Ratio Assets to Latest Liabilities
Bendix	$ 2,004,000	$ 5,414,000	$16,587,000	$16,852,000	$ 3,919,000	$ 3,609,000	4.3-1
Bohn-Aluminum	1,449,000	267,000	6,500,000	7,023,000	1,012,000	1,827,000	6.4-1
Borg-Warner	7,132,000	4,238,000	26,646,000	29,999,000	6,425,000	10,107,000	4.1-1
Briggs	9,470,000	7,667,000	24,712,000	29,636,000	5,671,000	11,193,000	4.3-1
Briggs & Stratton	932,000	1,139,000	2,542,000	2,394,000	529,000	557,000	4.8-1

(Continued on Next Page)

Current Financial Position of Automotive Manufacturing Companies, 1937-1938

(Continued from Previous Page)

E. G. Budd	1,018,000	3,778,000	9,925,000	9,501,000	3,702,000	2,784,000	2.6-1
Budd Wheel	612,000	793,000	3,046,000	3,156,000	1,143,000	1,436,000	2.7-1
Collins & Aikman	3,648,000	2,913,000	11,360,000	13,399,000	1,331,000	3,154,000	8.5-1
Eaton Mfg.	2,509,000	2,470,000	6,524,000	6,955,000	1,159,000	1,328,000	5.7-1
Electric Auto-Lite	4,143,000	1,536,000	19,162,000	16,294,000	5,207,000	7,606,000	3.7-1
Houdaille-Hershey	1,675,000	1,856,000	5,960,000	6,276,000	1,381,000	1,839,000	4.3-1
Midland Steel	5,270,000	4,788,000	8,688,000	9,004,000	1,406,000	1,925,000	6.2-1
Motor Products	2,944,000	3,356,000	5,211,000	6,431,000	1,095,000	2,109,000	4.8-1
Motor Wheel	1,102,000	486,000	5,808,000	7,238,000	1,413,000	2,591,000	4.1-1
Mullins Mfg.	427,000	332,000	2,114,000	2,398,000	673,000	873,000	3.1-1
Murray Corp.	759,000	613,000	7,300,000	7,342,000	1,936,000	2,755,000	3.8-1
Perfect Circle	1,077,000	1,096,000	2,419,000	2,350,000	349,000	388,000	6.9-1
Raybestos-Manhattan	1,969,000	2,234,000	8,907,000	10,059,000	1,236,000	1,955,000	7.2-1
Reynolds Spring	176,000	167,000	1,452,000	1,657,000	924,000	880,000	1.6-1
Spicer	828,000	751,000	4,845,000	4,500,000	2,711,000	1,806,000	1.8-1
Stewart-Warner	797,000	1,334,000	11,382,000	10,053,000	4,017,000	2,948,000	2.8-1
Thompson Products	322,000	248,000	4,706,000	4,243,000	1,812,000	1,542,000	2.6-1
Timken-Detroit	1,050,000	1,422,000	9,447,000	9,419,000	1,391,000	1,680,000	6.8-1
Timken Roller Bearing	9,557,000	15,797,000	26,886,000	29,912,000	3,683,000	3,776,000	7.3-1
Trico Products	2,617,000	3,305,000	5,366,000	6,764,000	3,477,000	3,529,000	1.5-1
L. A. Young S. & W.	1,224,000	583,000	4,778,000	4,607,000	1,358,000	1,676,000	3.5-1

Tire and Rubber Companies

	Cash or Equivalent Latest	Cash or Equivalent Year Ago	Current Assets Latest	Current Assets Year Ago	Current Liabilities Latest	Current Liabilities Year Ago	Ratio Assets to Latest Liabilities
Firestone	$10,714,000	$11,279,000	$88,333,000	$75,694,000	$41,800,000	$24,049,000	2.1-1
Fisk	639,000	1,533,000	9,977,000	10,184,000	1,156,000	1,404,000	8.7-1
General Tire & Rubber	689,000	774,000	10,287,000	8,583,000	3,120,000	2,367,000	3.3-1
B. F. Goodrich	7,778,000	16,626,000	75,429,000	82,277,000	14,108,000	14,950,000	5.3-1
Goodyear	11,612,000	14,628,000	108,635,000	114,234,000	9,137,000	8,569,000	12.-1
U. S. Rubber	10,889,000	13,070,000	90,310,000	80,647,000	26,768,000	23,693,000	3.4-1

Miscellaneous Companies

	Cash or Equivalent Latest	Cash or Equivalent Year Ago	Current Assets Latest	Current Assets Year Ago	Current Liabilities Latest	Current Liabilities Year Ago	Ratio Assets to Latest Liabilities
American Chain	$ 2,443,000	$ 992,000	$12,514,000	$11,580,000	$ 2,246,000	$ 2,665,000	5.6-1
Level'nd Graphite Bronze	731,000	581,000	3,113,000	2,673,000	639,000	638,000	4.9-1
Continental Motors	229,000	125,000	1,561,000	1,313,000	1,140,000	1,213,000	1.4-1
Electric Storage Btty.	14,885,000	16,876,000	27,445,000	27,418,000	2,201,000	1,807,000	12.-1
Evans Products	1,544,000	1,427,000	3,032,000	3,202,000	1,516,000	1,100,000	2.0-1
Hercules Motors	110,000	30,000	3,477,000	2,470,000	1,564,000	956,000	2.2-1
Waukesha Motors	552,000	665,000	4,370,000	3,666,000	871,000	657,000	5.0-1

Dividend Payments Automotive Companies For 6 Years, 1932-1937

DIVIDENDS

(Annual figures based on per share declarations on preferred and common stock times average number of shares outstanding)

CAR AND TRUCK COMPANIES

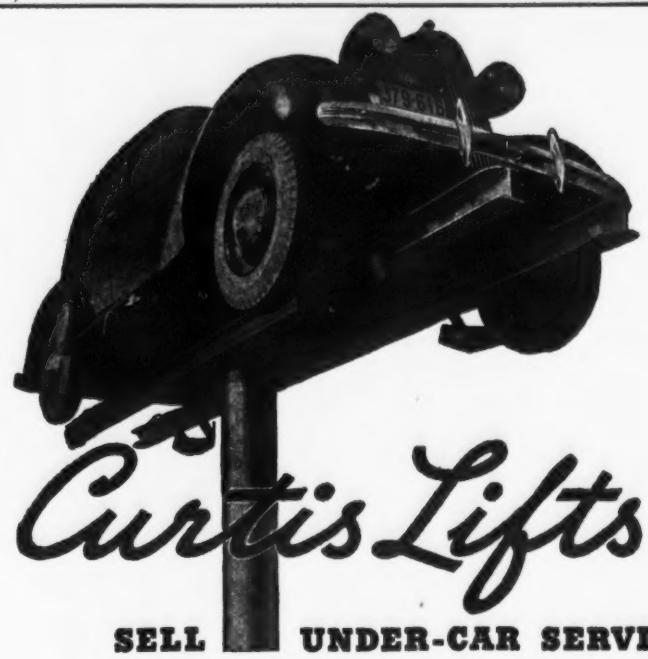
	1937	1936	1935	1934	1933	1932
Auburn	None	None	None	$225,000 (a)	$558,000 (a)	$874,000 (a)
Chrysler	$ 43,511,000	$ 52,191,000	$ 8,665,000	5,435,000	4,304,000	4,390,000
Federal Motor Truck	49,200	195,000	97,400	None	None	24,000
Ford of Canada	1,658,960	1,659,000	830,000	2,084,000	1,659,000	None
General Motors	170,327,000	202,700,000	105,655,000	65,250,000	63,752,000	63,752,000
Graham-Page	None	None	None	None	None	52,000
Hudson	397,000	None	None	None	None	None
Hupp	None	None	None	None	None	None
Mack Trucks	896,000	896,000	597,000	627,000	665,000	692,000
Nash-Kelvinator	4,263,000	2,647,000	2,646,000	1,985,000	1,985,000	4,095,000
Packard	3,750,000	6,750,000	None	None	None	None
Reo	None	None	None	None	None	None
Studebaker	None	None	None	None	None	992,000
White	None	None	None	None	None	3,125,000
Yellow Truck & Coach	3,023,581	5,000,000	None	None	None	None

(a)—Also 2% in stock in 1933 and 8% in 1931 and 1932.

PARTS AND ACCESSORY COMPANIES

	1937	1936	1935	1934	1933	1932
Ainsworth Mfg.	None	$ 759,000	$ 345,000	$ 172,000	$ 69,000	$ 69,000
Bendix	$ 2,098,000	3,150,000	525,000	None	None	315,000
Bohn Alum. & Brass	1,410,000	1,322,000	792,000	1,057,000	352,000	132,000
Borg-Warner	5,754,000	4,724,000	2,143,000	1,161,000	518,000	530,000
Bower Roller Bearing	None	750,000	240,000	179,000	None	108,000
Briggs & Stratton	1,040,000	891,000	891,000	505,000	375,000	375,000
Briggs Mfg.	7,846,000	7,916,000	5,820,000	3,386,000	None	799,000
E. G. Budd	None	None	None	None	None	None
Budd Wheel	233,000	246,000	196,000	None	None	28,000
Clark Equipment	None	376,000	267,000	266,000	138,000	80,000
Collins & Aikman	2,992,000	2,630,000	1,001,000	439,000	439,000	439,000
Eaton Mfg.	1,925,000	1,998,000	1,041,000	679,000	130,000	81,000
Electric Auto-Lite	3,127,000	3,420,000	667,000	314,000	293,000	1,987,000
Gabriel Co.	None	None	None	None	None	None
E. M. Hall Lamp	None	145,000	73,200	120,000	40,000	40,000
Hayes Body	None	None	None	None	None	None
Houdaille-Hershey	1,613,000	2,402,000	1,087,000	429,000	None	217,000
Kelsey-Hayes	None	792,000	None	None	None	None
Libbey-Owens-Ford	None	8,764,000	3,005,000	3,032,000	1,530,000	None
Martin-Rockwell	None	1,950,000	508,000	741,000	315,000	395,000
McCord Radiator	None	None	None	None	None	None
McQuay-Norris	None	475,000	343,000	343,000	344,000	341,000

(Continued on Next Page)



SELL UNDER-CAR SERVICE

Customers can see what is needed when you get their cars up on a Curtis Lift. With visible evidence, it is easy to sell them many profitable under-car repairs, such as:

brake adjustments • brake lining • muffler replacement • spring repairs • shock absorber adjustment • wheel alignment • tire service • steering linkage • tappet adjustments • chassis tightening • rear end overhaul • front end service

This is all *plus*-usefulness in addition to lubrication, for which Curtis Lifts are unsurpassed. Your men can work more efficiently and with less fatigue standing upright in good light than in a messy, cramped, poorly lighted pit. Also, you avoid the health, fire, explosion and accident hazards of the pit.

THESE FEATURES MAKE YOUR LIFT DOLLAR GO FARTHER WITH CURTIS:

- COMPLETE ACCESSIBILITY—every chassis point easily reached
- HANDLES ALL CARS—any make, any model
- SELF-LEVELING PLATFORM—won't stick coming down
- DROP-AWAY WHEEL GUIDES—automatically center car
- ABSOLUTE SAFETY—oil-locked, 4-ton capacity

CURTIS PNEUMATIC MACHINERY CO.
1993 Kienlen Avenue, St. Louis, Missouri

CREATORS of Unusual Processes Complementing Modern Requirements of Tomorrow's Automobile

•

WOODALL PRODUCTS

COMPLETE UPHOLSTERED PANELS
For Doors and Quarters

THERMO PLASTIC FORMED PANELS
To Specification for Passenger and Commercial Cars

SEMIFINISHED FOUNDATION PANELS
For Doors and Quarters

COATED AND GRAINED PANELS

SUN VISORS

MASONITE PANELS
Processed and Plain

INSULATING AND DASH PADS

SOUND ABSORPTION AND INSULATION ASSEMBLIES

WOODALL INDUSTRIES INC.

Detroit, Michigan • *Plants*, Detroit and Monroe

Who's Who

(Continued from Page 92)

D. Lindgren, adv. mgr.; F. W. Choate, engr. Adv. Agcy.—Warman and Landshaft, Buffalo, N. Y.

WILTON WOOLEN CO., Wilton, Me. Automobile fabrics, seat materials and sidewalls. George F. Goodspeed, chmn., pres.; George L. Hunt, vice-pres., gen. mgr.; Roy P. Gifford, secy. Det. Rep.—Wilton Woolen Co., 645 New Center bldg.

WIND-IMPELLER ELECTRIC WORKS, Ellsworth, Ia. Wind-electric plants, large storage batteries, portable electric welding generators. C. H. Christensen, pres.; R. Wing, secy.; S. T. Sydness, gen. mgr.

WINTER-WEISS CO., 22nd and Blake sts., Denver, Colo. Truck and trailer bodies, house trailers. H. A. Winter, pres.; A. D. Weiss, secy.-treas.; H. A. Winter, gen. and sales mgr.; J. J. McCready, chief engr.; A. D. Weiss, pur. agt.

WISCONSIN ALUMINUM FOUNDRY CO., Inc., 16th and Franklin sts., Manitowoc, Wis. Motorcycle and motor parts. Abe Schwartz, pres.; William Eck, sales mgr. and secy.; Meyer Schwartz, pur. agt. and treas.

WISCONSIN AUTOMOTIVE TRADES ASSN., 135 W. Wells st., Milwaukee, Wis. Trade association. Frank H. Applegate, pres.; Harold O. Hornburg, 1st vice-pres.; A. E. Rogers, 2nd vice-pres.; James B. King, secy.-treas.; Louis Milan, exec. secy.

WISCONSIN MOTOR CORP., 1910 S. 53rd st., West Allis, Wis. Air cooled and water cooled gasoline engines. H. A. Todd, pres. and gen. mgr.; H. M. Cronk, vice-pres. and sales mgr.; A. F. Milbrath, vice-pres. and engr.; P. M. Hauser, vice-pres.; C. O. Thomas, secy.-treas.; H. Thorkildsen, pur. agt.; R. H. Matzen, auditor.

WITHERBEE STORAGE BATTERY CO., 2032 Fidelity-Phila. Trust bldg., Philadelphia, Pa. Storage batteries. W. F. Price, pres.; F. M. Price, vice-pres.; T. A. Larkin, secy.; R. E. Hoeltzel, sales and adv. mgr.; G. S. Biles, engr.; A. A. Andreason, pur. agt.; S. Dershwin, export mgr. Adv. Agcy.—B. W. Stelle, Inc., Philadelphia, Pa.

WOHLERT CORP., 700 E. Grand River, Lansing, Mich. Flywheel bands and miscellaneous automotive parts. Fred Wohlert, Jr., chmn. and gen. mmgr.; Walter F. Patenge, vice-pres. and sales mgr.; Catherine Wieber, secy.-treas.; Arthur Reiser, engr.; A. N. Snyder, pur. agt. Adv. Agcy.—Sales Promotion Counsel, Lansing, Mich.

(See display advertising index)

WOLVERINE FABRICATING & MFG. CO., Inc., 3530-3546 W. Fort st., Detroit, Mich. Gaskets, anti-squeaks. Robert L. Kreuz, pres.; Gordon Grantham and Wm. P. Seeney, vice-pres.; G. F. Metelski, secy.-treas.; Harry Mason, engr.; Harold V. Wood, pur. agt.

WOLVERINE FURNITURE CORP., Trailer Coach Div., Schoolcraft, Mich. Trailer coaches and chairs. C. B. Grames, pres. and gen. mgr.; Kenneth O'Dell, vice-pres.; V. D. Weaver, secy.-treas.

WOOD, FRANK N. CO., 317-321 W. St. Paul ave., Waukesha, Wis. Commutator lathe and undercutter, tailstock rest. Frank N. Wood. Det. Rep.—M. M. Moats, 691 Seward ave. Adv. Agcy.—Advertisers' Service, Inc., Railway Exchange bldg., Milwaukee, Wis.

(Continued on Next Page)

CLAW
TIRE CHAINS
CROSS CHAINS
EMERGENCY CHAINS
COLUMBUS McKINNON CHAIN CORPORATION
TONAWANDA N. Y.

IMPROVED GASOLINE MILEAGE TESTER
Individually graduated to a 99⅔% guaranteed accuracy, fast filling, durable, easy to install and operate.
Donat A. Gauthier
7408 Poe Ave.
Detroit, Michigan

Servicing the Industry
With high quality "Excelsior" Flywheel Gears, Cylinder Heads, Flywheel Housings, Clutch Housings, Transmission Cases and Exhaust Manifolds . . . .
MANUFACTURED BY
THE SPRINGFIELD MANUFACTURING CO.
SPRINGFIELD, OHIO

To men of particular tastes . . .

STYLES OF 1850
Marshall & Bernhard
ESTABLISHED 1898
TAILORS
408 David Whitney Building
Detroit

Dividend Payments Automotive Companies For 6 Years, 1932-1937

(Continued from Previous Page)

Midland Steel Prods.	1,829,000	1,816,000	760,000	854,000	664,000	964,000
Modine Mfg.	None	202,000	101,000	61,000	15,000	70,000
Motor Products	1,956,000	1,271,000	392,000	None	None	382,000
Motor Wheel	1,360,000	935,000	361,250	None	None	None
Mullins Mfg.	200,000	262,000	None	None	None	None
Murray Corp.	238,000	465,000	None	None	None	None
Noblitt-Sparks Ind.	None	350,000(a)	217,000	195,000(a)	37,500	30,400
Perfect Circle	526,000	546,000	325,000	325,000	322,000	322,000
Raybestos-Manhattan	1,107,000	1,111,000	635,000	641,000	386,000	453,000
Reynolds Spring	220,000	217,000	116,000	14,500	None	None
Spicer Mfg.	810,000	900,000	210,000	261,000	216,000	264,000
Stewart-Warner	1,242,000	1,242,000	621,000	None	None	None
Thermoid Co.	None	None	None	None	None	None
Timken-Detroit	1,627,000	1,960,000	174,000	194,000	194,000	194,000
Timken Roller Bearing	10,056,000	9,050,000	7,234,000	2,773,000	1,688,000	3,316,000
Trico Products	1,961,000	1,125,000	1,125,000	937,000	937,000	937,000
Vogt Mfg.	None	250,000	150,000	50,000	None	30,000
L. A. Young Spring & Wire	919,000	1,330,000	1,125,000	292,000	97,000	388,000

(a)—Also 100% stock in 1934 and $1.50 or 1/20th share of stock in 1936.

MISCELLANEOUS

	1937	1936	1935	1934	1933	1932
American Chain	$ 2,096,000	$ 1,555,000	$ 154,000	None	None	None
Cleveland G & B	2,582,000	805,000	644,000	280,000	129,000	120,000
Continental Motors	None	None	None	None	None	None
Cord Corp.	None	None	(a)	$ 564,000	$ 678,000	None
Electric Storage Battery	2,270,000	2,500,000	3,817,000	3,629,000	1,815,000	$ 2,198,000
Evans Products	183,000	427,000	None	None	None	None
Hercules Motor	311,000	543,000	248,000	140,000	None	125,000
Waukesha Motors	500,000	340,000	120,000	120,000	120,000	225,000

(a)—Distributed stock of American Airlines, Inc., and Canadian Colonial Airways, Inc., to Cord stockholders in 1935.

Composite Experience of Sales Finance Companies and Automobile Dealers for 1937

U. S.

Year	Thousands of Cars Financed: New	Used	All	Millions of Dollars Retail Paper: New	Used	All	Wholesale	Average Note Purchased: New	Used	All	Percent of Cars Repossessed: New	Used	All	Avg. Loss Per Repossessed Car: New	Used	All
1925	...	...	...	...	...	...	...	$550	$280	...	2.1	3.6	...	...	...	$55
1926	...	...	...	...	...	...	...	595	277	...	2.4	4.7	...	...	...	69
1927	...	...	...	...	...	...	...	574	286	...	2.9	5.3	...	...	...	45
1928	1,333	1,133	2,466	848	348	1,196	...	635	307	$485	2.9	5.6	4.1	...	...	59
1929	1,892	1,656	3,548	1,126	491	1,617	678	595	297	456	3.0	5.6	4.2	...	...	63
1930	1,381	1,609	2,990	778	450	1,228	661	564	280	411	3.7	6.9	5.4	...	...	65
1931	1,028	1,420	2,448	570	380	950	554	554	268	388	4.5	11.4	8.5	...	...	47
1932	555	967	1,522	303	233	536	330	546	241	352	5.7	13.1	10.4	...	...	59
1933	760	1,068	1,828	392	235	627	500	516	220	343	2.8	7.8	5.7	...	...	42
1934	1,064	1,355	2,419	587	307	894	907	551	226	370	2.9	7.2	5.3	$64	$45	50
1935	1,334	1,792	3,126	734	424	1,158	1,403	550	237	370	2.7	10.7	7.3	67	53	55
1936	1,908	2,356	4,264	1,106	610	1,716	1,704	580	258	400	2.2	7.5	5.1	61	49	51
1937	1,747	2,453	4,200	1,035	686	1,721	1,887	593	279	410	4.1	13.2	9.4	53	52	52
Canada																
1935	32.0	68.0	100.0	22.4	18.0	40.4	...	$701	$263	$404	1.3	4.4	3.4	$	$21	$
1936	42.9	94.7	137.6	29.9	25.0	54.9	...	698	264	399	1.5	10.0	7.4	61	25	27
1937	56.2	121.7	177.9	40.7	35.2	75.9	...	723	289	426	...	...	...	...	...	...

U S.

Year	Skips Per 1000 Deals	Percentage of Paper over 12 Months: New	Used	All	% Paper With Sub-standard* Down Payment: New	Used	All	% of Cars Sold on Instalments: New	Used	All	Trade-ins: On New Cars %	On Used Cars %	% of New Cars Sold	Used Cars Sold % of New**	Junked % of Trade-ins
1925	...	...	...	18.3	...	...	19.4	68.2	62.8	65.5	...	...	99.0	98.8	...
1926	...	...	...	13.2	...	...	9.0	64.5	65.2	64.8	...	...	90.0	89.4	...
1927	...	...	...	12.4	...	...	5.2	58.0	63.1	60.8	72.0	37.1	116.0	118.5	6.9
1928	4.7	...	...	14.5	...	...	6.1	58.1	60.8	59.5	69.4	39.4	115.5	117.0	8.1
1929	5.2	...	...	14.9	...	...	8.0	62.6	65.1	64.0	72.5	45.5	131.0	128.6	9.2
1930	5.1	...	...	16.6	...	...	11.8	62.3	64.8	63.8	75.1	49.1	155.6	164.4	14.3
1931	5.5	...	...	17.8	...	...	11.1	62.8	60.4	61.3	80.2	46.7	160.0	170.6	13.5
1932	5.5	...	...	21.9	...	...	13.7	54.6	47.0	48.6	88.7	47.7	177.4	185.9	14.3
1933	4.6	...	...	12.9	...	...	11.6	56.8	56.8	56.8	85.8	51.5	177.5	178.0	12.9
1934	2.2	37.6	14.6	29.8	17.0	20.5	18.2	54.4	57.9	56.6	74.7	47.3	150.4	160.1	8.1
1935	2.4	62.3	24.1	48.3	29.1	42.7	34.1	58.0	62.6	60.8	84.8	55.0	171.6	157.8	8.9
1936	2.6	71.8	35.5	58.9	25.6	26.7	26.0	60.9	58.5	59.4	84.7	50.9	168.3	164.1	10.8
1937	1.7	77.2	54.1	68.0	23.1	23.5	23.3	57.2	60.1	59.0	83.9	55.2	174.9	164.8	7.7
Canada															
1935	3.5	58.2	25.4	44.2	18.6	10.0	14.8	47.2	60.9	56.0	84.0	54.2	181.8	182.2	4.6
1936	4.7	59.4	17.5	40.3	18.3	6.1	12.7	49.0	61.3	57.1	82.4	53.9	186.2	192.5	7.1
1937	...	51.7	26.5	40.0	28.2	19.1	23.2	52.4	63.3	59.7	85.0	54.8	192.9	196.7	5.3

*Standard down payment means ⅓ for new cars and 40% for used cars, except that for 1936 and 1937 it means ⅓ for both new and used cars.

**Excluding cars junked.

NOTE: Figures below the dashed line cover both passenger and commercial vehicles. Those above the line relate chiefly to passenger cars, but with some small percentage of commercial vehicles.

Source: National Assn. of Sales Finance Companies.

Who's Who

(Continued from Previous Page)

WOOD, GAR INDUSTRIES, Inc., 7924 Riopelle st., Detroit, Mich. Mechanical and hydraulic hoists, truck and trailer bodies, tanks, winches, cranes and pole derricks, air-conditioning units, rear engine streamline motor coaches. Garfield A. Wood, pres.; Ralph S. Jenkins, vice-pres. in chge. of mfg.; Sherman D. Callender, Clinton W. Wood, Louis S. Wood, Philip S. Wood, vice-pres.; G. A. Bassett, treas.; Murlen M. Wood, secy.; J. H. Kerns, pur. agt.; W. H. Hammond, sales mgr., hoist and body div.; Harold Laubach, gen. mgr., tank div.; W. E. Fletcher, sales mgr., tank div.; H. Sydney Snodgrass, gen. mgr., motor coach div.; G. E. Robinson, gen. mgr., winch div. **Adv. Agcy.**—Farron Stevens, Stormfeltz-Lovely bldg., Detroit, Mich.

WOOD & SPENCER CO., 1930 E. 61st st., Cleveland, O. Steel nuts, taps, patterns. D. G. Miller, pres.; F. H. Wood, vice-pres. and sales mgr.; C. L. Reinke, pur. agt. and secy.-treas. **Det. Rep.**—E. D. Williamson, 8-155 General Motors bldg.

WOODWORTH SPECIALTIES CO., 121 Montgomery st., Binghamton, N. Y. Tire chains, bumper jacks, rubber license plate frames, lubricating spring covers, rubber chain tighteners. C. B. Woodworth, gen. and adv. mgr.; R. A. Woodworth, D. E. Woodworth. **Det. Rep.**—N. E. MacEwan, 4-155 General Motors bldg.

Gasoline Consumption by States, 1935-1937

(Compiled by American Petroleum Institute)

	12 Months Ending With Dec., 1935 Gallons	Dec., 1936 Gallons	Dec., 1937 Gallons
Alabama	172,477,000	204,623,000	225,865,000
Arizona	80,994,000	95,648,000	103,869,000
Arkansas	143,379,000	154,222,000	164,146,000
California	1,480,008,000	1,653,597,000	1,757,845,000
Colorado	184,442,000	204,746,000	221,028,000
Connecticut	269,399,000	299,405,000	326,907,000
Delaware	45,104,000	50,581,000	54,678,000
District of Columbia	112,540,000	127,204,000	136,984,000
Florida	263,010,000	312,980,000	328,915,000
Georgia	264,618,000	305,198,000	331,770,000
Idaho	72,352,000	87,847,000	94,607,000
Illinois	1,069,243,000	1,191,916,000	1,293,364,000
Indiana	496,835,000	578,777,000	633,819,000
Iowa	421,152,000	460,208,000	495,896,000
Kansas	409,941,000	450,331,000	470,172,000
Kentucky	201,325,000	228,333,000	251,884,000
Louisiana	185,851,000	216,401,000	238,535,000
Maine	120,879,000	134,521,000	145,443,000
Maryland	217,266,000	245,232,000	270,188,000
Massachusetts	612,557,000	657,753,000	696,484,000
Michigan	862,367,000	995,781,000	1,110,640,000
Minnesota	456,444,000	480,874,000	509,898,000
Mississippi	147,335,000	170,885,000	189,801,000
Missouri	509,061,000	567,601,000	590,496,000
Montana	96,326,000	111,522,000	115,920,000
Nebraska	226,673,000	230,362,000	229,110,000
Nevada	26,541,000	34,226,000	37,368,000
New Hampshire	73,904,000	80,898,000	85,295,000
New Jersey	735,771,000	745,482,000	820,577,000
New Mexico	62,340,000	75,849,000	88,683,000
New York	1,610,544,000	1,721,830,000	1,815,562,000
North Carolina	309,800,000	348,154,000	389,441,000
North Dakota	120,077,000	111,373,000	121,741,000
Ohio	1,014,926,000	1,202,954,000	1,308,748,000
Oklahoma	327,551,000	369,916,000	389,945,000
Oregon	183,005,000	215,778,000	226,833,000
Pennsylvania	1,171,438,000	1,283,280,000	1,417,478,000
Rhode Island	114,786,000	118,362,000	122,366,000
South Carolina	144,729,000	163,927,000	188,169,000
South Dakota	118,967,000	113,381,000	113,721,000
Tennessee	224,355,000	266,320,000	266,921,000
Texas	942,268,000	1,107,190,000	1,220,261,000
Utah	71,121,000	83,361,000	91,110,000
Vermont	51,388,000	60,026,000	65,797,000
Virginia	282,436,000	316,556,000	342,626,000
Washington	273,586,000	319,473,000	334,482,000
West Virginia	159,090,000	181,334,000	196,236,000
Wisconsin	442,444,000	504,522,000	541,100,000
Wyoming	49,498,000	58,679,000	64,021,000
Total	**17,632,143,000**	**19,699,419,000**	**21,236,659,000**
Daily Average	48,307,000	49,231,137	58,183,000
Change from previous year:			
Total Increase	+386,453,000	+386,453,000	+1,537,240,000
Percentage Change in Daily Average	+6.30%	+1.91%	+8.10%

Trend in Car Sales Operations for 1937

	Passenger Car Sales	Commercial Car Sales	Total
Dealers Reporting	586	356	586
New cars sold at retail	125,875	13,750	139,625
New cars sold on installment	74,555	5,291	79,846
Used cars sold at retail	219,506	10,574	230,080
Used cars sold on installment	132,602	5,775	138,377
Used cars junked	17,681	1,165	18,846
Used cars traded on new sales	110,585	6,555	117,140
Used cars traded on used sales	121,846	5,185	127,031
Total used cars taken in trade	232,431	11,740	244,171
Average new car sales per dealer	215	39	238
Average used car sales per dealer	375	30	393
Average used cars traded in per dealer	397	33	417
Percentage Sold on Installments:			
New cars	59.2	38.5	57.2
Used cars	60.4	54.6	60.1
All cars	60.0	45.5	59.0
Percentage of Trade-Ins and Used Car Sales:			
Trade-ins on sales of new cars	87.9	47.7	83.9
Trade-ins on sales of used cars	55.5	49.0	55.2
Total trade-ins in percentage of new cars sold	184.6	85.4	174.9
Used cars sold in percentage of new cars sold	188.4	85.4	178.3
Used cars junked in percentage of total trade-ins	7.6	9.9	7.7
Inventories:			
New cars on hand Jan. 1, 1937	8,624	797	9,421
New cars on hand Dec. 31, 1937	17,154	1,786	18,940
Used cars on hand Jan. 1, 1937	26,122	1,680	27,802
Used cars on hand Dec. 31, 1937	25,405	2,082	27,487
Percentage change new car inventory	+98.9	+124.1	+101.0
Percentage change used car inventory	−2.7	+23.9	−1.1

WORLD BESTOS CORP., 52 Courtland st., Paterson, N. J. Brake lining, moulded and woven. Samuel Cametta, Jr., pres.; C. P. Brockway, vice-pres. and gen. mgr.; Samuel S. Flug, secy.; Wm. Nanfeldt, engr.; R. H. Ellwood, pur. agt. **Det. Rep.**—R. S. Crotty, 78 W. Warren ave.

WRIGHT MFG. DIV., American Chain & Cable Co., Inc., York, Pa. High speed chain hoists, electric hoists, screw geared chain hoists, differential chain hoists, jib cranes, winches, cranes, machinist vises, hydraulic and screw presses, air compressors, sling chains, pressure lubricators. W. B. Lashar, chmn.; W. T. Morris, pres.; W. F. Wheeler, A. P. Van Schaick, C. G. Williams and G. C. Moon, vice-pres.; W. M. Wheeler, secy.; C. B. Veit, sales mgr.; J. O. Lashar, adv. mgr. **Adv. Agcy.**—Reincke-Ellis-Younggreen & Finn, 520 N. Michigan ave., Chicago, Ill.

WROUGHT WASHER MFG. CO., 2216 S. Bay st., Milwaukee, Wis. Washers of all types, tools and dies, special stampings, screw machine products, expansion plugs. F. C. Doepke, pres.; C. H. Disch, vice-pres. and pur. agt.; Eugene Caldwell, gen. mgr.; Wm. F. Disch, sales mgr. and secy.-treas.; C. G. Crabb, adv. mgr.; C. R. Dowdy, engr.

WYZENBEEK & STAFF, Inc., 838 W. Hubbard st., Chicago, Ill. Andrew Wyzenbeek, pres.; S. Wyzenbeek, vice-pres. and secy.; H. O. Erickson, gen. mgr.; H. N. Knapp, sales mgr.

X

"X" LABORATORIES, Inc., 25 W. 45th st., New York, N. Y. Radiator liquid, radiator flush, laboratories dry cleaner, powder, etc. E. R. Tolfree, pres.; L. D. Patterson, gen. and sales mgr. and pur. agt. **Adv. Agcy.**—Humbert & Jones, 238 E. 45th st., New York, N. Y.

Y

YALE & TOWNE MFG. CO., Henry st., Stamford, Conn. Automobile locks, electric hoists, chain hoists, electric industrial trucks, tractors and trailers, hand lift trucks and skid platforms, electric road trucks. Walter C. Allen, chmn.; W. Gibson Carey, Jr., pres.; Joseph A. Horne, vice-pres.; John H. Towne, secy.; Fred Dunning, treas.; Walter B. Dodge, gen. sales mgr.; A. D. Dalton, engr.; A. B. Nordin, Jr., pur. agt. **Det. Rep.**—S. F. Rolph, sales mgr., Automotive Products, 2679 E. Grand blvd. **Adv. Agcy.**—Redfield-Johnstone, Inc., 247 Park ave., New York, N. Y.

YANKEE FIBER TILE MFG. CO., 51 Selden ave., Detroit, Mich. Chrome-plated and aluminum mouldings for trailers. Joseph B. Pospeshil, pres. and gen. mgr.; James H. McTaggart, vice-pres. and sales mgr.; A. M. Pospeshil, secy.-treas.; W. J. Kilpatrick, engr.; Al Kansier, pur. agt.

YANKEE METAL PRODUCTS CORP., 31 Grand st., Norwalk, Conn. Directional signals, reflectors, fender guides, stop and tail lights. Wm. Berk, pres.; Benj. Putterman, secy.-treas.; J. M. Robins, gen. mgr.; B. Emmer, sales mgr.; J. M. Robins, adv. mgr.; D. Reed, engr. **Det. Rep.**—Glenn Meeder, 266 Algonquin, Columbus, O. **Adv. Agcy.**—Cliff Advertising Agency, 68 W. 48th st., New York, N. Y.

YATES-AMERICAN MACHINE CO., 708 Fourth st., Beloit, Wis. Woodworking machines, radiators, engine cooling, portable tools, heat transfer units, condensers and evaporators. E. J. Dalton, pres.; Alvin Haas, vice-pres. and gen. mgr.; A. H. Woeckel, secy.; J. W. Bussler, treas.; F. W. Bassett, asst. treas.; Roger Birdsell, mgr. radiator div.; F. J. Oberlander, C. H. Kelly, O. G. Jenness and D. V. Steger, sales mgrs.; G. C. Mueller, adv. mgr.; W. D. Johnson, chief engr.; E. E. Hertzfeldt, pur. agt.

YORK CORRUGATING CO., York, Pa. Fenders, door, roof and dash panels, radiator grilles, hoods, instrument boards, running boards, etc. C. P. Rice, pres. and gen. mgr.; E. J. Rice, vice-pres. and pur agt.; J. A. Grass, adv. mgr. and secy.; Gordon L. Reed, engr. **Det. Rep.**—Rex I. Lee, 223 Humber bldg.

YORK-HOOVER BODY CORP. (Body Div.), Wheatfield and Md. & P. R. R., York, Pa. Composite and "All Steel" bodies of all types. H. W. Stone, pres.; C. P. Rice, vice-pres.; E. M. Grass, treas.; D. A. Kennedy, gen. mgr.; Chas. Ziegler, sales and adv. mgr.; Wm. Secrist, engr.; Luther Dettinger, pur. agt. and secy.

YOUNG, L. A. SPRING & WIRE CORP., 9200 Russell st., Detroit, Mich. Cushion and back springs for automobiles, mechanical springs, wire shelves and diversified wire products. L. A. Young, chmn.; C. M. Young, pres., gen. mgr.; V. H. Kendall, vice-pres.; T. D. Stewart, sales mgr., secy.; H. V. Backus, engr.; E. F. Janis, H. Quagline, T. Cooper, pur. agts. **Adv. Agcy.**—Zimmer-Keller, Inc., 2210 Park ave., Detroit, Mich.

(See display advertising index)

YOUNG RADIATOR CO., 709 S. Marquette st., Racine, Wis. Heavy-duty radiators, oil coolers, heating coils, evaporators, condensers, etc. F. M. Young, pres., gen. mgr.; J. J. Hilt, vice-pres., sales mgr.; M. F. May, vice-pres., sales mgr.; W. H. Schleck, secy.-treas.; C. E. Pugh, adv. mgr.; S. K. Anderson and W. V. Astrup, engrs.; R. W. Baggott, pur. agt.

YOUNGSTOWN SHEET AND TUBE CO., Stambaugh bldg., Youngstown, O. Raw materials, flat sheet products, steel bars, semi-finished products, tubular steel, rigid steel conduit, wire, tools, etc. H. G. Dalton, chmn.; Frank Purnell, pres.; W. E. Watson, W. B. Gillies, W. E. Meub, vice-pres.; J. C. Argetsinger, vice-pres., secy.; Geo. E. Benson, treas.; C. H. Longfield, sales mgr.; M. S. Curtis, adv. mgr.; J. D. Jones, engr.; C. T. Moke, pur. agt.; H. H. Waldschmidt, dir. of purch. **Det. Rep.** — Youngstown Steel Products, Fisher bldg. **Adv. Agcy.**—Griswold-Eshleman Co., Terminal Tower, Cleveland, O.

YOUNG WINDOWS OF AMERICA, 570 Seventh ave., New York, N. Y. Crankless regulators and window sash. M. B. Deschler, gen. mgr. **Det. Rep.**—Valin Sales Co., 7318 Hamilton ave.

Z

ZENITH CARBURETOR CO. (Subsidiary of Bendix Aviation Corp.) 696 Hart ave., Detroit, Mich. Carburetors, filters, mileage testers, flame arrestors, safety drip collectors. V. R. Heftler, pres.; B. W. Westcott, vice-pres.; Julian Gifford, asst. secy.-treas.; F. E. Williams, sales prom. mgr.; L. W. Paterson, research engr.; D. J. Martin, pur. agt. **Adv. Agcy.**—Roche, Williams & Cunningham, Inc., Chicago, Ill. and Aarons, Sill & Caron, Inc., Detroit, Mich.

ZENITH RADIO CORP., 6001 Dickens ave., Chicago, Ill. Auto radios. E. F. McDonald, pres.; E. A. Tracey, Hugh Robertson, vice-pres.; R. F. Weinig, sales mgr., auto radio; Edgar Herrmann, adv. mgr.; G. E. Gustafson, engr.; W. A. Hurtienne, pur. agt. **Adv. Agcy.**—E. H. Brown Co., 140 S. Dearborn, Chicago, Ill.

ZIM MFG. CO., 3037-3047 Carroll ave., Chicago, Ill. Valve lifters and grinders, valve seat reamers, refacers, piston ring expanders and compressors, wheel and gear pullers, ridge reamers, piston groove cutters and cleaners, valve grinding guides and bushing removers, valve tappet Tool, valve keeper inserter, dash controls and cotter pin pullers. E. J. Zimmerman, pres., sales mgr.; H. A. Berkman, vice-pres., engr.; R. W. Zimmerman, secy.; F. J. Kross, supt.

ZLMAIR CORP., 4041 Whiteside ave., Los Angeles, Calif. Trailers. Paul G. Zimmermann, pres.; Geo. J. Dunbaugh, secy.-treas.; H. G. LaForge, sales mgr.; Joseph Killen, engr.; Howard Wilson, pur. agt.

ZIP ABRASIVE CO., 2019 Center st., Cleveland, O. Grinding compound, jack ring compound, etc. Edmund Rogers, pres.; John F. Werder, vice-pres.; Frank E. Fogg, secy.

ZOERMAN-CLARK MFG. CO., Jackson, Mich. Welding solder for aluminum, screw plates, punches, chisels, screw drivers, valve seat inserts, hydraulic brake clamps, armature lathes, armature centers, reamers, pliers, gauges, hack saws, gear pullers, clutch tools. J. H. Zoerman, pres., gen. mgr.; Jake Zoerman, vice-pres.; B. D. Zoerman, treas.

ZOLLNER MACHINE WORKS, Bueter rd., Ft. Wayne, Ind. Pistons (aluminum alloy). Theo. Zollner, pres.; Fred Zollner, vice-pres.; Janet Z. Hester, secy.-treas.

AUTOMOBILE CLOCKS

ELECTRIC 8-DAY 30-HOUR

MIRROR AND HEADER TYPES

WIDE RANGE OF DESIGNS AND PRICES

PRODUCTS OF THE AUTOMOBILE CLOCK DIVISION

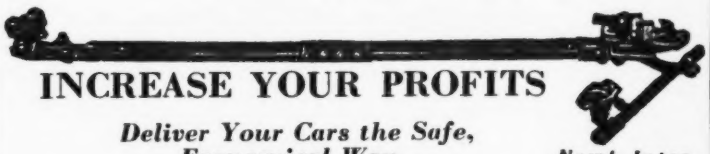
THE NEW HAVEN CLOCK CO.

NEW HAVEN, CONN.

fine timepieces since 1817

MONARCH TOW BARS

Cut Delivery Costs in Half



INCREASE YOUR PROFITS

Deliver Your Cars the Safe, Economical Way

You can save money by using Monarch Tow Bars to cut your delivery costs. They are scientifically designed, sturdily built with all-steel castings, accurately machined. You get perfect alignment plus the utmost strength. Wire, write or phone for literature and prices.

New! Interchangeable attachment for handling the new 1939 Chrysler, DeSoto, Dodge and Plymouth knee-action cars.

Monarch Tow Bar Company

Division of John P. Fleming Driveaway System

12801 Kercheval DETROIT MUrray 9577

FOR Truck Mixers, Earth Movers, Paving Contractors, Oil Field Operators, Tank Haulers, Quarries, Public Utilities, Building Suppliers, Loggers, Dairymen, Machinery Haulers, Farmers, etc.

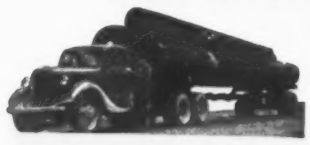
THORNTON

FOUR REAR WHEEL DRIVE

TRUCK Dealers turn a handsome profit and earn customers' good will when they promote the sale of Thornton Four Rear Wheel Drives. Write for Distributor's name and full information as to conversion of any 1½ to 3 ton chassis into heavy duty truck with two rear driving axles, 10 wheelbase lengths, 26,000 lbs. to 30,000 lbs. gross capacity.

THORNTON TANDEM COMPANY

8701 Grinnell Ave. Detroit, Michigan



1937 State Registration Fees

STATE	Total Receipts, Registration and Other Fees	Total Cars and Trucks	Automobiles	Motor Trucks	Trailers and Semi-Trailers	Motorcycles	Total Registration Fees, All Vehicles
Alabama	$ 4,439,000	$ 3,979,000	$	$	$	$	$ 3,979,000
Arizona	1,143,000	807,000	355,000	423,000	55,000	1,000	863,000
Arkansas	3,241,000	2,553,000	1,116,000	1,368,000	416,000	1,000	2,970,000
California	24,003,000	21,172,000	16,645,000	4,527,000	979,000	57,000	22,208,000
Colorado	2,603,000	2,051,000	1,557,000	494,000	29,000	2,000	2,082,000
Connecticut	6,691,000	4,247,000	2,691,000	1,427,000	22,000	6,000	4,275,000
Delaware	1,202,000	870,000	596,000	274,000	30,000	1,000	901,000
Florida	6,196,000	5,597,000	3,729,000	1,702,000	236,000	6,000	5,839,000
Georgia	2,368,000	1,875,000	1,098,000	712,000	125,000	3,000	2,003,000
Idaho	2,498,000	2,295,000	1,620,000	648,000	34,000	3,000	2,332,000
Illinois	21,430,000	19,455,000	13,563,000	5,892,000	170,000	15,000	19,640,000
Indiana	9,827,000	7,768,000	5,800,000	1,870,000	329,000	7,000	8,104,000
Iowa	11,918,000	10,888,000	8,213,000	2,675,000	86,000	8,000	10,982,000
Kansas	4,537,000	3,636,000	2,773,000	863,000	75,000	4,000	3,715,000
Kentucky	5,125,000	2,706,000	1,454,000	1,172,000	.....	2,000	2,708,000
Louisiana	4,710,000	4,052,000	2,746,000	1,245,000	569,000	4,000	4,625,000
Maine	3,865,000	2,932,000	2,159,000	760,000	57	5,000	2,994,000
Maryland	5,577,000	3,497,000	2,728,000	617,000	115,000	7,000	3,619,000
Massachusetts	6,875,000	4,221,000	2,684,000	1,406,000	23,000	2,000	4,246,000
Michigan	22,085,000	18,514,000	13,025,000	5,489,000	1,015,000	15,000	19,544,000
Minnesota	8,867,000	8,309,000	6,232,000	1,930,000	258,000	6,000	8,573,000
Mississippi	2,248,000	2,198,000	.....	.....	.....	.....	2,198,000
Missouri	9,638,000	8,184,000	6,842,000	1,342,000	129,000	9,000	8,322,000
Montana	1,532,000	1,257,000	871,000	363,000	9,000	1,000	1,267,000
Nebraska	2,603,000	1,980,000	1,218,000	741,000	39,000	2,000	2,021,000
Nevada	282,000	267,000	162,000	104,000	10,000	1,000	278,000
N. Hampshire	2,347,000	2,067,000	.....	.....	.....	5,000	2,072,000
New Jersey	19,271,000	13,601,000	9,269,000	4,029,000	262,000	9,000	13,872,000
New Mexico	1,544,000	1,421,000	888,000	492,000	25,000	1,000	1,447,000
New York	52,901,000	42,947,000	31,114,000	11,833,000	556,000	47,000	43,550,000
No. Carolina	8,855,000	8,546,000	5,377,000	3,114,000	.....	6,000	8,552,000
No. Dakota	1,581,000	1,407,000	1,057,000	340,000	3,000	2,000	1,412,000
Ohio	25,635,000	22,747,000	14,612,000	8,135,000	1,183,000	38,000	23,968,000
Oklahoma	5,584,000	4,131,000	2,458,000	1,596,000	195,000	4,000	4,330,000
Oregon	3,378,000	2,617,000	1,495,000	1,083,000	.....	5,000	2,622,000
Pennsylvania	38,332,000	27,747,000	18,451,000	8,686,000	383,000	30,000	28,160,000
Rhode Island	2,790,000	2,194,000	1,670,000	482,000	2,000	3,000	2,199,000
So. Carolina	1,690,000	1,156,000	725,000	431,000	56,000	1,000	1,213,000
So. Dakota	1,650,000	1,572,000	1,349,000	220,000	28,000	1,000	1,601,000
Tennessee	4,233,000	3,910,000	.....	.....	.....	.....	3,910,000
Texas	19,684,000	18,308,000	11,583,000	6,575,000	482,000	16,000	18,806,000
Utah	1,049,000	865,000	500,000	365,000	29,000	1,000	895,000
Vermont	2,410,000	2,036,000	1,408,000	614,000	21,000	4,000	2,061,000
Virginia	6,153,000	5,449,000	3,999,000	1,450,000	57,000	6,000	5,512,000
Washington	4,402,000	2,530,000	1,427,000	1,103,000	212,000	6,000	2,748,000
W. Virginia	6,162,000	4,706,000	3,619,000	1,066,000	60,000	5,000	4,771,000
Wisconsin	12,984,000	12,281,000	8,940,000	3,047,000	353,000	15,000	12,649,000
Wyoming	597,000	549,000	357,000	192,000	31,000	1,000	581,000
Dist. of Col.	878,000	188,000	164,000	23,000	2,000	1,000	191,000
Partial Tot.							
Grand Tot.	**$399,613,000**	**$328,285,000**	**$220,339,000**	**$ 92,920,000**	**$ 8,750,000**	**$ 375,000**	**$337,410,000**

The Cost of Gasoline Taxation

State	Year Tax Levied	Collections Through 1936	Estimated Collections 1937	Estimated Grand Total
Alabama	1923	$ 87,256,397	$ 13,295,000	$ 100,551,397
Arizona	1921	30,862,691	4,325,000	35,187,691
Arkansas	1921	76,322,479	9,877,000	86,199,479
California	1923	403,186,538	46,614,000	449,800,538
Colorado	1919	63,837,769	7,431,000	71,268,769
Connecticut	1921	56,012,756	9,445,000	65,457,756
Delaware	1923	12,505,875	2,031,000	14,536,875
District of Columbia	1924	20,360,470	2,724,000	23,084,470
Florida	1921	172,222,246	22,023,000	194,245,246
Georgia	1921	140,785,604	19,550,000	160,335,604
Idaho	1923	28,265,133	4,035,000	32,300,133
Illinois	1927	226,766,280	35,836,000	262,602,280
Indiana	1923	188,023,316	22,987,000	211,010,316
Iowa	1925	109,487,306	13,023,000	122,510,306
Kansas	1925	84,498,968	10,083,000	94,581,968
Kentucky	1920	96,362,979	12,671,000	109,033,979
Louisiana	1921	85,042,284	15,923,000	100,965,284
Maine	1923	44,348,682	5,550,000	49,898,682
Maryland	1922	77,525,531	9,857,000	87,382,531
Massachusetts	1929	122,174,769	19,836,000	142,010,769
Michigan	1925	225,335,279	29,425,000	254,760,279
Minnesota	1925	104,363,417	15,293,000	119,656,417
Mississippi	1922	74,234,756	10,222,000	84,456,756
Missouri	1925	97,319,697	11,082,000	108,401,697
Montana	1921	33,514,999	4,581,000	38,095,999
Nebraska	1925	84,101,687	10,925,000	95,026,687
Nevada	1923	8,544,437	1,177,000	9,721,437
New Hampshire	1923	26,721,073	3,286,000	30,007,073
New Jersey	1927	138,863,405	21,565,000	160,428,405
New Mexico	1919	26,329,293	4,003,000	30,332,293
New York	1929	320,529,907	61,841,000	382,370,907
North Carolina	1921	164,793,785	22,429,000	187,222,785
North Dakota	1919	22,543,533	2,873,000	25,416,533
Ohio	1925	365,527,448	46,538,000	412,065,448
Oklahoma	1923	121,348,727	13,768,000	135,116,727
Oregon	1919	75,680,378	9,799,000	85,479,378
Pennsylvania	1921	365,305,847	55,711,000	421,016,847
Rhode Island	1925	18,413,190	3,090,000	21,503,190
South Carolina	1922	83,842,691	10,901,000	94,743,691
South Dakota	1922	40,256,842	4,071,000	44,327,842
Tennessee	1923	123,819,293	17,914,000	141,733,293
Texas	1923	290,937,088	41,671,000	332,608,088
Utah	1923	25,700,350	3,421,000	29,121,350
Vermont	1923	18,948,696	2,323,000	21,271,696
Virginia	1923	125,395,625	16,114,000	141,509,625
Washington	1921	104,898,441	15,268,000	120,166,441
West Virginia	1923	59,400,839	8,488,000	67,888,839
Wisconsin	1925	134,950,261	19,537,000	124,487,261
Wyoming	1923	16,229,233	2,498,000	18,727,233
TOTAL		**$5,423,698,290**	**$756,930,000**	**$6,180,628,290**

Federal Gasoline Tax Collections
$ 62,839,827—1932
181,125,988—1933
170,109,270—1934
172,262,481—1935
186,321,449—1936
203,025,380—1937

GRAND TOTAL—Cost of federal and state gasoline taxes, 1919 through 1937 ..... **$7,132,435,901**

New Commercial Car Registrations by States, 1932-1937

	1937	1936	1935	1934	1933	1932
Alabama	12,874	13,187	9,925	8,051	4,054	1,982
Arizona	3,659	3,510	3,126	2,167	1,086	566
Arkansas	10,836	9,485	7,383	4,960	3,638	1,467
California	36,901	33,656	28,943	20,496	13,788	10,732
Colorado	8,411	9,060	6,086	5,196	2,488	2,001
Connecticut	7,767	8,240	7,318	6,124	4,246	3,056
Delaware	1,882	1,723	1,425	1,115	828	597
Florida	10,722	9,412	8,274	8,046	4,186	2,894
Georgia	12,998	12,941	10,887	7,921	5,260	2,544
Idaho	4,454	4,939	4,004	2,817	1,545	673
Illinois	30,451	31,123	23,046	17,584	11,764	7,863
Indiana	18,269	20,027	18,009	11,123	6,121	4,849
Iowa	12,449	12,999	12,754	9,860	5,449	4,154
Kansas	12,409	11,406	9,605	7,170	4,292	3,119
Kentucky	11,597	10,870	9,089	6,815	4,195	2,819
Louisiana	10,111	9,753	7,201	5,359	2,882	1,844
Maine	5,658	5,337	4,104	4,262	2,614	2,240
Maryland	7,763	7,382	6,657	5,457	3,818	2,953
Massachusetts	16,235	15,350	14,514	12,887	9,511	7,290
Michigan	24,549	24,840	21,104	16,281	9,085	6,402
Minnesota	13,555	14,144	12,740	9,255	5,722	4,858
Mississippi	11,176	10,367	6,573	5,414	2,752	1,476
Missouri	19,170	20,142	16,200	12,920	8,535	7,645
Montana	5,044	5,930	5,939	4,215	2,055	1,150
Nebraska	6,202	6,996	6,297	5,411	2,713	2,108
Nevada	1,167	1,210	1,006	638	233	320
New Hampshire	3,022	3,196	2,490	2,731	1,783	1,152
New Jersey	18,446	16,935	13,165	11,444	7,401	7,505
New Mexico	5,089	4,545	4,058	3,150	1,395	817
New York	41,922	39,159	35,805	30,383	20,200	19,943
North Carolina	15,691	14,286	13,835	11,185	6,597	3,620
North Dakota	3,193	2,680	3,144	2,389	1,107	786
Ohio	28,440	30,028	22,772	20,487	11,150	8,753
Oklahoma	14,702	14,737	11,768	8,944	4,941	2,594
Oregon	7,859	8,050	5,964	3,780	2,488	1,451
Pennsylvania	39,150	41,919	32,097	29,891	19,991	15,618
Rhode Island	2,749	2,594	2,088	2,035	1,598	1,152
South Carolina	7,257	6,091	5,481	4,228	2,604	1,213
South Dakota	2,659	2,962	3,020	2,252	996	704
Tennessee	10,799	11,062	9,518	6,366	3,623	2,031
Texas	40,905	38,903	32,437	24,854	13,889	8,819
Utah	3,298	3,571	3,498	2,530	1,568	758
Vermont	2,444	2,308	2,394	2,048	1,311	972
Virginia	12,928	12,904	11,402	8,508	5,667	4,105
Washington	10,222	10,666	9,076	6,199	4,002	2,471
West Virginia	9,269	9,181	6,646	5,847	2,988	1,844
Wisconsin	16,415	16,237	13,118	9,313	5,411	4,522
Wyoming	2,627	2,661	2,206	1,799	937	613
Dist. of Columbia	2,857	2,940	2,492	1,979	1,362	1,368
Yearly Totals	**618,249**	**611,644**	**510,683**	**403,886**	**245,869**	**180,413**

List of Commercial Car Manufacturers in Order of VOLUME of SALES—1937-1936

MAKE	1937	1937 Pos.	1936	1936 Pos.	Unit Change	Pct. Change
Ford	**189,376**	1	177,244	2	12,132	6.8
Chevrolet	**183,674**	2	204,344	1	20,670*	10.1 *
International	**76,174**	3	71,958	4	4,216	5.9
Dodge	**64,098**	4	85,295	3	21,197*	24.8 *
G. M. C.	**43,522**	5	26,980	5	16,542	61.3
Plymouth	**13,709**	6	2,420	13	11,289	466.4
Diamond T	**8,118**	7	8,750	6	632*	7.2 *
White	**5,933**	8	5,757	7	176	3.1
Mack	**5,513**	9	4,226	9	1,287	30.4
Studebaker	**5,129**	10	3,279	10	1,850	56.4
Terraplane	**4,823**	11	1,905	14	2,918	153.1
Reo	**4,254**	12	4,227	8	27	.64
Federal	**2,339**	13	2,930	11	591*	20.1 *
Autocar	**2,181**	14	1,451	17	730	50.0
Brockway	**1,593**	15	1,695	16	102*	6.0 *
Indiana	**1,371**	16	1,705	15	334*	19.5 *
Stewart	**1,148**	17	1,280	18	132*	10.3 *
Willys	**1,122**	18	2,441	12	1,319*	54.0 *
Sterling	**311**	19	277	19	34	12.3
Miscellaneous	**3,861**		3,480		381	10.95
Total	**618,249**		**611,644**		**6,605**	**1.1**

*Loss.

List of Commercial Car Manufacturers in Order of PERCENTAGE of SALES INCREASES—1937-1936

MAKE	Pct. Change	Unit Change	Gain Pos.	1937	1937 Pos.	1936	1936 Pos.
Plymouth	**466.4**	11,289	1	13,709	6	2,420	13
Terraplane	**153.1**	2,918	2	4,823	11	1,905	14
G. M. C.	**61.3**	16,542	3	43,522	5	26,980	5
Studebaker	**56.4**	1,850	4	5,129	10	3,279	10
Autocar	**50.0**	730	5	2,181	14	1,451	17
Mack	**30.4**	1,287	6	5,513	9	3,279	9
Sterling	**12.3**	34	7	311	19	277	19
Ford	**6.8**	12,132	8	189,376	1	177,244	2
International	**5.9**	4,216	9	76,174	3	71,958	4
White	**3.1**	176	10	5,933	8	5,757	7
Reo	**.64**	27	11	4,254	12	4,227	8
Brockway	**6.0 ***	102*	12	1,593	15	1,695	16
Diamond T	**7.2 ***	632*	13	8,118	7	8,750	6
Chevrolet	**10.1 ***	20,670*	14	183,674	2	204,344	1
Stewart	**10.3 ***	132*	15	1,148	17	1,280	18
Indiana	**19.5 ***	334*	16	1,371	16	1,705	15
Federal	**20.1 ***	591*	17	2,339	13	2,930	11
Dodge	**24.8 ***	21,197*	18	64,098	4	85,295	3
Willys	**54.0 ***	1,319*	19	1,122	18	2,441	12
Miscellaneous	**10.95**	381		3,861		3,480	
Total	**1.1**	**6,605**		**618,249**		**611,644**	

*Loss

Status of Safety Glass Laws

Status of State Safety Glass Laws July 1, 1937

STATE	Date Law Effective: Pvt. Pass.	School Buses	Public Buses	Trucks	Brief Definition of 'Safety Glass' in Law	Specification
Alabama						
Arizona						
Arkansas		7 1 '37	7 1 '37		P S F	None
California	1 1 '36	7 1 '32	1 1 '36	1 1 '36	R L I	None
Colorado	(1) 1 1 '37	4 10 '35 Recom.	4 10 '35	(1) 1 1 '37	P S F	None
Connecticut	1 1 '36	(2)	6 1 '35		R L I	ASA
Delaware	7 1 '35	7 1 '35	7 1 '35	7 1 '35	R L I	ASA
Dist of Col.	1 1 '36	1 1 '36	1 1 '33	1 1 '36	Non-Scat.	None
Florida						
Georgia						
Idaho						
Illinois	1 1 '36	1 1 '36	1 1 '36	1 1 '36	P S F	None
Indiana	1 1 '36	1 1 '36	1 1 '36	1 1 '36	R L I	None
Iowa	7 1 '35	7 1 '35	1 1 '35		P S F	Pa.
Kansas	(1) 1 1 '38	7 1 '37	7 1 '37	(1) 1 1 '38	P S F	?
Kentucky						
Louisiana	1 1 '37	1 1 '37	1 1 '37	1 1 '37	R L I	ASA
Maine	1 1 '38	1 1 '38	1 1 '37	1 1 '38	P S F	ASA
Maryland	7 1 '35	7 1 '35	7 1 '35	7 1 '35	P S F	N. Y.
Mass.	1 1 '36	1 1 '36	1 1 '36	1 1 '36	R L I	None
Michigan	7 1 '34	7 1 '32	7 1 '32	7 1 '34	P S F	None
Minnesota	4 26 '38	10 26 '37	10 26 '37	4 26 '38	P S F	?
Mississippi						
Missouri	1 1 '36	1 1 '36	1 1 '36		R L I	None
Montana						
Nebraska	1 1 '35	1 1 '34	1 1 '34		Laminated	Own
Nevada						
New Hamp.	1 1 '36	1 1 '36	1 1 '36	1 1 '36	R L I	None
New Jersey	7 1 '35	7 1 '35	7 1 '35	7 1 '35	D of C	ASA
New Mexico						
New York	1 1 '35	1 1 '34	1 1 '34	1 1 '35	P S F	Own
N. Carolina	1 1 '36	1 1 '36	1 1 '36	1 1 '36	R L I	None
N. Dakota		7 1 '35	7 1 '35		Shatterpr'f	None
Ohio	1 1 '36	1 1 '36	1 1 '36	1 1 '36	R L I	ASA
Oklahoma		7 1 '35	7 1 '35		R L I	None
Oregon						
Pennsylvania	1 1 '35	1 1 '34	1 1 '34	1 1 '35	P S F	Own
Rhode Island	1 1 '38	1 1 '38	1 1 '38	1 1 '38	P S F	?
S. Carolina	1 1 '37	1 1 '37	1 1 '37	1 1 '37	R L I	ASA
S. Dakota						
Tennessee			11 15 '33		Shatterpr'f	
Texas						
Utah		1 1 '36	1 1 '36		P S F	ASA
Vermont	1 1 '36	1 1 '36	1 1 '36	1 1 '36	P S F	None
Virginia	1 1 '36	1 1 '35	1 1 '35	1 1 '36	P S F	ASA
Washington	1 1 '38	1 1 '38	1 1 '38	1 1 '38	P S F	?
W. Virginia	1 1 '37	1 1 '37	1 1 '37	1 1 '37	R L I	ASA
Wisconsin	1 1 '36	1 1 '36	1 1 '36	1 1 '36	R L I	None
Wyoming						

(1)Windshields only. (2)School buses affected only by rules of Department of Education unless registered with PUC. PSF means Prevent Shattering and Flying. RLI means Reduce Likelihood of Injury. D of C means Discretion of Commissioner.

Motor Taxes Paid by Owners 1919-1937

(Facts and Figures, Automobile Manufacturers Assn.)

	State Registration Fees	State Gasoline Tax	Federal Excise Taxes†	Personal Property City and County Taxes‡	Total*
1919	$ 64,697,255	$ 1,022,514	$101,138,191	$35,000,000	$ 202,365,681
1920	102,546,212	1,363,902	149,207,520	40,000,000	295,157,877
1921	122,478,654	5,382,111	99,967,423	45,000,000	274,604,682
1922	152,047,824	12,703,088	114,793,400	50,000,000	331,329,932
1923	188,970,992	38,566,338	155,796,944	55,000,000	440,241,674
1924	225,492,252	80,442,295	139,201,755	60,000,000	507,150,141
1925	260,619,621	148,358,087	143,430,709	62,000,000	616,273,492
1926	288,282,352	187,603,231	96,255,639	66,000,000	638,272,350
1927	301,061,132	258,838,813	60,473,708	68,000,000	688,373,653
1928	322,630,025	304,871,766	20,386,176	69,000,000	716,887,967
1929	347,843,543	431,311,519	.....	70,000,000	849,155,062
1930	355,704,860	493,865,117	.....	70,000,000	919,569,997
1931	344,337,654	536,397,458	.....	68,000,000	948,735,112
1932	324,273,510	513,047,239	81,290,193§	68,382,000	986,992,942
1933	302,715,884	518,195,712	247,744,425	70,000,000	1,138,656,021
1934	307,260,000	565,027,000	252,151,729	80,400,000	1,204,838,729
1935	322,974,000	616,851,671	273,324,821	85,500,000	1,298,650,492
1936	359,783,000	686,631,000	314,352,976	87,500,000	1,448,266,976
1937	399,613,000	756,930,000	340,447,000	88,000,000	1,584,990,000

These are taxes on the motor vehicle owners. Income and property taxes on motor vehicle, body, parts and tire factories, garages, dealers, repair shops, terminals and truck, taxicab and bus operating companies are not included.

*Totals include federal tax on vehicles for hire (fiscal year): 1919—$507,721; 1920—2,040,243; 1921—$1,776,494; 1922—$1,785,620; 1923—$1,907,400; 1924—$2,013,839; 1925—$1,865,075; 1926—$131,128.

†Figures from Bureau of Internal Revenue; War tax removed May 29, 1928. ‡Estimated by Automobile Manufacturers Assn., including bridge and tunnel tolls.

§On sales between June 21st and December 31st, 1932.

United States and Canada '29-'37

Production—Total Industry—Cars and Trucks

(Table from GM Annual Report)

Year	Units	Estimated Retail Sales Value
1929	5,621,715	$4,774,822,000
1930	3,510,178	2,839,014,000
1931	2,472,359	1,904,586,000
1932	1,431,494	1,058,715,000
1933	1,985,909	1,318,227,000
1934	2,869,963	2,052,283,000
1935	4,182,430	2,965,000,000
1936	4,616,857	3,380,791,000
1937	5,016,565	3,851,842,000

Summary of State for Inspection Laws

In Force June 1, 1938

This tabulation represents merely the salient features of State Laws on the subject, such features being expressed in accordance with our interpretation thereof. Attorneys and others wishing complete details should consult the laws themselves.

(Automobile Manufacturers Assn.)

STATES WHERE LAW AND SPECIFIC PROVISIONS THEREOF ARE IN FORCE ARE MARKED BY (X)	ALA	ARI	ARK	CAL	COL	CONN	DEL	FLA	GA	IDA	ILL	IND	IOWA	KAN	KY	LA	ME	MD	MASS	MICH	MINN	MISS	MO	MONT	NEB	NEV	NH	NJ	NM	NY	NC	ND	OHIO	OKLA	ORE	PA	RI	SC	SD	TENN	TEX	UTAH	VT	VA	WASH	WVA	WISC	WYO
Law in Effect		(2)	X	(2)	X	X	X				(2)	X	(2)	X		(2)	X	X	X		X					X		X	X	X	X	(2)				X	X	(2)		(2)	(2)	X	X	X	X	X		(2)	
SALIENT FEATURES OF LAWS		(3)		(3)	(3)		(3)				(3)			(3)									(3)		(3)				(3)				(3)									(3)							
A Administrative Provisions:												(1)		(1)							(1)				(1)											(1)						(1)					(1)		
Law provides for the inspection of motor vehicles by the establishment or authorization of:																																																	
(1) Inspection stations			X		X	X	X					X		X			X	X	X		X					X		X	X	X					X	X					X	X	X	X	X			
(a) To be operated by:																																																	
(1) The state						X	X																					X																			X		
(2) Private agencies			X		X							X					X	X	X							X		X		X						X						X	X	X					
(3) Municipalities			X									X		X							X					X									X							X						X		
(b) Under the supervision of:																																																	
(1) The Motor Vehicle Department					X																																				X								
(2) The Commissioner of Motor Vehicles						X	X											X									X	X	X													X	X	X					
(3) The Secretary of Revenue																																				X														
(4) The State Police Department			X																																															
(5) The municipal government											X		X							X					X										X						X							X		
(6) Other governmental agencies											X						X		X						X																									
(2) A system of inspection to be defined by an administrative body or official (See Notes—4)						(4) X	(4) X										(4) X		(4) X											(4) X																				
B Scope of Inspection:																																																	
(1) Motor Vehicles			X		X	X	X					X		X				X	X		X					X		X	X	X					X	X					X	X	X	X					
(2) Trailers			X		X							X						X	X							X		X								X						X	X	X					
(3) Semi-Trailers			X		X							X														X										X						X		X					
(4) School buses																			X											X																				
(5) Motorcycles					X																																													
(6) Buses having carrying capacity exceeding seven																														X																				
To be inspected as to:																																																	
(1) All equipment required by law			X		X	X	X					X		X				X			X					X		X	X						X						X	X	X	X					
(2) Brakes			X		X							X					X		X									X	X							X						X							
(3) Lights			X		X							X					X		X										X							X						X							
(4) Horn			X		X							X					X		X																	X						X							
(5) Steering Gear			X		X							X					X		X										X							X						X							
(6) Windshield cleaner			X		X							X					X		X																	X						X							
(7) Muffler																	X		X																														
(8) Number plates																			X																														
(9) Mirrors			X		X							X					X																			X						X							
(10) Equipment to be prescribed																	X													X												X							
(11) Mechanism																													X															X					
C Number of Inspections:																																																	
(1) At least once a year			X		X		X																		X											X						X							
(2) Not more frequently than twice a year			X		X																															X						X							
(3) Semi-annually						X						X					X																								X								
(4) Not more than four times per year																																																	
(5) At discretion of Commission																		X									X			X													X						
(6) At any time upon reasonable cause			X		X		X										X																			X						X		X					
(7) At other times (See Notes—5)						X																							X						X						X		X		X			
D Duties of Administrative Body or Official:																																																	
(1) Issue permits for inspection stations												X						X																										X	X				
(2) Promulgate rules and regulations						X																																											
(3) Supervise and inspect stations			X		X								X				X			X								X								X						X							
(4) Require bonding of stations																																									X								
(5) Designate inspection by certificate of inspection and approval							X																												X								X					
E Inspection Fees:																																																	
(1) No fee			X		X																				X											X						X		X					
(2) 25c per inspection			X		X									X			X			X					X			X								X						X		X	X				
(3) Discretionary fee up to 50c per inspection																	X																																
(4) $1. per inspection			X																																						X		X						
(5) Other rates (See Notes—6)			X		X	X							X				X			X					X			X	X	X						X						X				X		
F Enforcement:																																																	
The registration of any vehicle may be suspended or denied if found:																																																	
(1) Unsafe so as to constitute a menace to society			X		X		X											X			X							X	X							X						X							
(2) Not equipped as required by law			X		X		X											X			X				X			X	X						X							X	X		X			
G Penalties for violation of any of the provisions of the measure:																																																	
(1) Fine			X		X								X					X							X			X	X	X						X						X	X		X			
(2) Imprisonment			X		X								X																X	X						X						X	X		X			
(3) Suspension of registration			X		X	X											X	X	X		X						X															X	X		X			
(4) Impounding of vehicle																																													X				
(5) To be prescribed																																			X														
H Exceptions:																																																	
A vehicle may be exempt from inspection where:																																																	
(1) It has been inspected by a state with similar laws			X		X												X																			X													
(2) It has been inspected by a state commission																																									X		X						

(1) Iowa, Minnesota, Oregon, Texas—These states have statutes permitting the establishment or continued operation of inspection stations by municipalities. Arkansas, Illinois, Nebraska, Washington—These states have statutes, dual by nature, providing for inspection stations to be operated by municipalities and private or state agencies. Despite statutory language inspection, depending upon enforcement, may as in Illinois be in the hands of the municipalities, it may be controlled by the states, or it may be divided between the two governments.

(2) Arizona, Idaho, Louisiana, North Carolina, Rhode Island, South Dakota, Wisconsin—These states have statutes permitting the designation of official station for adjusting lights and issuing adjustment certificates. California, Indiana, Tennessee—These states have similar statutes authorizing inspections for brakes as well as lights. The above statutes, enforcement of which is lax, may well be deemed the predecessors of the statutes digested in this chart.

(3) Arizona, California, Colorado, Delaware, Idaho, Kansas, Missouri, Nebraska, New Mexico, Oklahoma, Utah—These states according to a survey entitled "State Barriers to Highway Transportation," made by the National Highway Users Conference, Washington, D. C., have either "port of entry" legislation, or regulations of like purport without special legislation. Under the authority of such legislation or regulations, inspection of motor vehicles, usually limited to buses and trucks, is sometimes undertaken before they are permitted to enter a state.

(4) Connecticut, Delaware, Maine, Massachusetts, New York—The methods of inspection employed in these states are governed by rules and regulations promulgated by admimistrative officers or bodies pursuant to statutory powers vested in them. The tabulations applicable to these states include some of the salient provisions of these rules and regulations.

(5) Kentucky, Texas—Inspections are required before motor vehicles previously sold for junk may be registered. New Mexico—Inspection is required once every four years. Oregon, Vermont, Washington—Periodic inspections are required.

(6) Delaware—A fee of $1.00 is required for inspections made at any time other than that prescribed by the statutes. Oregon—Each municipality is permitted to charge a reasonable fee. Vermont—Power is granted to the Commissioner of Motor Vehicles to set a reasonable fee and to require that the amount thereof be set off against the cost of any repairs made to a motor vehicle in complying with the inspection standards.

(7) District of Columbia—At the time of the registration of a motor vehicle, or a trailer, an inspection will be made, beginning in 1939, for which a fee of $1.00 will be charged. In subsequent years the fee will be reduced to $.50. Registration may be refused any motor vehicle or trailer improperly equipped. Buildings and equipment for the inspections will be erected and maintained by the District.

Men Employed on All Federal and Federal-Aid Highway Construction

Month	Fiscal Year 1937	Fiscal Year 1938
July	191,041	159,489
August	178,756	163,331
Sept.	143,455	152,784
Oct.	135,660	143,617
Nov.	118,898	121,394
Dec.	103,493	85,365
Jan.	82,731	54,899
Feb.	70,418	49,713
March	86,050	51,229
April	132,834	67,829
May	193,269	98,179
June	237,330	114,373
Total (man months)	1,673,935	1,262,202

Average Employment and Earnings of Workers in Automobile, Body and Parts Plants

Year	Employment (Thousand Persons)	Payrolls (Million Dollars)	Year	Employment (Thousand Persons)	Payrolls (Million Dollars)
1919*	343	$491	1929*	447	$733
1920	355	592	1930	323	431
1921*	213	319	1931*	286	351
1922	290	431	1932	244	255
1923*	405	660	1933*	244	252
1924	377	594	1934	381	447
1925*	426	714	1935	445	676
1926	422	688	1936	460	676
1927*	369	613	1937	517	806
1928	435	747			

*U. S. Census of Manufacturers. Other years have been estimated by adjusting Bureau of Labor Statistics monthly indices of employment and payroll to the Census of Manufacturers.

Index to Automotive Almanac for 1938

Page

REGISTRATIONS (Retail Sales)

U. S. New Passenger Cars

Makes by Months, 1929-1937 ... 34-35
Makes by Months, Comparative, 1937-1936 ... 40-41
Makes, Percentage of Increase, 1937-1936 ... 38
Makes, Percentage to Industry Total, 1932-1937 ... 50
Makes, Position in Geographical Divisions, 1937 ... 32-33
Makes, Positions in States, 1937 ... 32-33
Makes, Rank by Volume, 1937-1936 ... 38
Makes and States, 1929-1937 ... 18-27
Makes and States, Comparative, 1937-1936 ... 30-31
Makes and States, Six Months, 1938 ... 14
Makes by Years, 1932-1937 ... 44
Months, Percentages of Year Total, 1929-1937 ... 36
Months, by States, 1930-1937 ... 28-29
Months, by Years, 1929-1937 ... 44
Percentage Increase, Makes, 1937-1936 ... 38
Percentage Increase, States, 1937-1936 ... 38
Percentage, Makes of Industry Total, 1932-1937 ... 50
Percentage, Months to Year Total, 1929-1937 ... 36
Percentage, States to U. S. Total, 1930-1937 ... 42
Position, Makes in Geographical Divisions, 1937 ... 32-33
Position, Makes in States, 1937 ... 32-33
State Fees, 1937 ... 96
States and Makes, 1929-1937 ... 18-27
States by Months, 1930-1937 ... 28-29
States, Number of Cars on Farms ... 46
States, Percentage of Increase, 1937-1936 ... 38
States, Percentage of U. S. Total, 1930-1937 ... 42
States, Rank by Volume, 1937-1936 ... 38
States by Years, 1932-1937 ... 44
Twelve-Year Chart, 1926-1937 ... 9
Years by Makes, 1932-1937 ... 44
Years by Months, 1929-1937 ... 44
Years by States, 1932-1937 ... 44

New Commercial Cars

Makes by Months, 1932-1937 ... 66
Makes by Volume, 1936-1937 ... 96
Makes, Percentage Industry Total, 1932-1937 ... 72
Makes, Position, States, 1937 ... 68
Makes, in States, Comparative, 1937-1936 ... 62
Months, Percentage, Year Total, 1929-1937 ... 36
Months, by Makes, 1932-1937 ... 66
Months by States, 1934-1937 ... 40-41
Months by States, Six Months, 1938 ... 64
Months by Years, 1929-1937 ... 44
Percentage Increase, Makes, 1936-1937 ... 96
Percentage Increase, States, 1936-1937 ... 68
Percentage, Makes to Industry Total, 1932-1937 ... 72
Percentage, Months to Year Total, 1929-1937 ... 36
Percentage, States to U. S. Total, 1930-1937 ... 44
Position, Makes in States, 1937 ... 68
States by Makes, 1937-1936 ... 62
States, Number of Cars on Farms ... 46
States, Percentage Increase, 1937-1936 ... 68
States, Percentage U. S. Total, 1930-1937 ... 42
States, Rank by Volume, 1937-1936 ... 68
States by Years ... 96
Twelve-Year Chart, 1926-1937 ... 9
Years by Months, 1929-1937 ... 44

U. S. New Car and Truck Combined

Months by Years, 1929-1937 ... 36
Percentage Year Total by Months, 1929-1937 ... 36
Years by Months, 1929-1937 ... 44

U. S. Total in Operation

Commercial Cars, Annual, 1895-1937 ... 44
Commercial Cars by States, 1929-1937 ... 68-72
Passenger Cars by States, 1928-1937 ... 88
Passenger Cars, Annual, 1895-1937 ... 44

Canadian New Car

Years by Provinces, 1931-1937 ... 74

Canadian New Commercial Car

Years by Provinces, 1931-1937 ... 74

Canadian Total in Operation

Years, 1907-1937 ... 74

PRODUCTION (Factory Sales)

United States

Months and Makes, 1936-1938 ... 70

U. S. and Canada

AN Estimate, Makes and Months, 1936-1938 ... 70
Annual, 1900-1937 ... 50
Capacities, Commercial Cars, 1927-1937 ... 33
Commercial Cars, by Months, 1929-1937 ... 36
Combined Car and Truck, by Months, 1929-1937 ... 36
General Motors Factory Sales, by Divisions, 1928-1937 ... 84
General Motors Factory Sales, Total, 1933-1937 ... 84
Passenger Cars, by Months, 1929-1937 ... 36
Percentage Change, Annual, 1920-1937 ... 70
Percentage, Months to Year Total, 1929-1937 ... 36
Percentage of Production to Exports ... 50

Page

Retail Value of Total Production 1929-1937 ... 97
Wholesale Value, Cars and Trucks, 1900-1937 ... 50

Canadian

Capacities, Commercial Cars, 1937-1936 ... 74
Cars, Trucks Combined, by Months, 1929-1937 ... 74

World

Production, 1937-1936 ... 50

PASSENGER CARS (General)

Chronology, Makers of ... 12
Exports ... (See Exports)
Financing New Cars ... 94
Production, U. S. and Canada ... (See Production)
Registrations, U. S. and Canada (See Registrations)
Retailing Analysis ... 84-88
Sales, Factory, U. S. and Canada ... (See Production)
Sales, Export ... (See Export)
Sales, Retail, U. S. and Canada ... (See Registrations)
Sales, Used Car ... (See Used Car)
Selling Trends ... 84-95
Twelve-Year Registration Chart ... 9
Wholesale Value Factory Sales, U. S.-Canada ... (See Production)

COMMERCIAL CARS (General)

Capacities, Production by ... (See Production)
Exports ... (See Exports)
Federal Excise Taxes on ... 33
Production, U. S. and Canada ... (See Production)

Advertising Index 1938 Almanac

Page

A C Spark Plug Div. G. M. Corp. ... 78
American Legion Monthly ... 43
Bundy Tubing Co. ... 74
Campbell Ewald Co. ... 16 and 17
Cambridge Instrument Co., Inc. ... 86
Capper-Harmon-Slocum, Inc. ... Inside back cover
Chevrolet Motor Div. G.M. Corp. ... 10 and 11
Christian Science Monitor ... 60
Chrysler Corp. ... 4
Climax Molybdenum Co. ... 79
Columbia Broadcasting Co. ... Inside front cover
Columbus McKinnon Chain Corp. ... 94
Continental Motors Corp. ... 77
Curtis Pneumatic Machinery Co. ... 93
Detroit Gray Iron Foundry Co. ... 75
Detroit Insurance Agency ... 85
Dodge Div. Chrysler Corp. ... 54 and 55
Dole Valve Co. ... 91
E. A. Laboratories, Inc. ... 89
Eaton Mfg. Co. ... 67
Electric Auto-Lite Co. ... 81
Ethyl Gasoline Corp. ... 69
Ford Motor Co. ... 6
Fortune Magazine ... 61
Gauthier, Donat A. ... 94
Goodrich, B. F. Co. ... 37
Handy Governor Corp. ... 76
Harrison Radiator Div. G. M. Corp. ... 82
Hyatt Bearings Div. G. M. Corp. ... 45
International Harvester Co., Inc. ... 63
King-Seeley Corp. ... 86
Laidlaw Co., Inc. ... 86
Libbey-Owens-Ford Glass Co. ... 71
Marshall Renchard ... 94
McAleer Mfg. Co. ... 73
McLouth Steel Corp. ... 89
McQuay Norris Mfg. Co. ... 72, 76, 80, 82
Mack Trucks, Inc. ... 65
Monarch Tow Bar Co. ... 95
Midwest Farm Papers, Inc. ... 47
National Carbon Co. ... 88
National Used Car Market Report, Inc. ... 84
New Haven Clock Co. ... 95
Norma-Hoffman Bearings Corp. ... 88
Plymouth Div. Chrysler Corp. ... 39
Prest-O-Lite Battery Corp. ... 91
Quaker State Oil Refining Corp. ... 83
Reynolds Spring Co. ... 90
William C. Roney ... 92
Springfield Mfg. Co. ... 94
Studebaker Corp. ... 13
Thornton Tandem ... 95
United Specialties Co. ... 80
United States Rubber Products, Inc. ... Back cover
Wagner Electric Corp. ... 59
Ward Plastic & Rubber Co. ... 89
Wohlert Corp. ... 89
Willys-Overland Motors, Inc. ... 15
WJR Detroit ... 49
Woodall Industries, Inc. ... 93
Young, L. A. Spring & Wire Corp. ... 87

Page

Registrations, U. S. and Canada (See Registration)
Sales, Export ... (See Export)
Sales, Factory, U. S. and Canada ... (See Production)
Sales, Retail, U. S. and Canada ... (See Registration)
Taxes, Special Truck ... 33
Twelve-Year Registration Chart ... 9

TRAILERS

Registrations of ... 72

USED CARS

Exports ... (See Exports)
Financing of Used Cars ... 94
Retailing Analysis ... 84-88
Selling Trends ... 84-95

PARTS AND ACCESSORIES

Exports ... (See Exports)
Production, Dollar Volume, 1936-1937 ... 9
Sales Index ... 70

TIRES

Production and Shipments, 1929-1937 ... 68-84

EXPORTS (Imports)

United States

Passenger Cars and Chassis, by Price Class, 1937-1936 ... 68
Value, Total, 1937-1936 ... 32
Value, Vehicles Only, 1937-1936 ... 32

World

Exports, Complete Motor Vehicles, 1937-1936 ... 50
Percentage of Production to Exports ... 50

TAXATION

General

Federal Excise Taxes, 1934-1937 ... 32
Gasoline Taxes, Cost of ... 96
Special Truck Taxes Paid, 1927-1937 ... 33
State Sales Tax Chart ... 46
Taxes Paid by Car Owners, 1919-1937 ... 97

EMPLOYMENT

Average and Earnings Automobile, Body and Parts Plants ... 32-97
Federal and State Highway ... 50-97

ADVERTISING

Radio, Expenditures for 1927-1937 ... 48-49
Radio Programs, Sponsors, Artists, 1927-1937 ... 48-49

FINANCIAL

Capital Invested in Industry ... 48
Dividend Payments, 1931-1936 ... 93-94
Financial Position Automotive Companies, 1937-1936 ... 92-93
Financial Structure ... 92
Financing New, Used Cars ... 94

HIGHWAYS

Employment, Federal and State, 1937 ... 32
Employment, State, Federal, 1934-1937 ... 50-97

GASOLINE

Consumption by States, 1937-1935 ... 95

SERVICE

Equipment, Tools Shipped, 1933-1937 ... 70
Replacement Parts, Shipment ... 70

FEATURES

Automobile Growth ... 7
Automobile Operation Cost in Cities ... 72
Automotive News Family Album ... 51-58
Car Makers' Chronology ... 12
Cartoons, Highlighting News ... 8
Inspection Laws, 1938 ... 97
Insurance Rates ... 85
Outlook for 1939 ... 7
Rear View Mirror, a Review of the Year by Chris Sinsabaugh ... 7
Safety Glass Laws ... 97
State Sales Tax Chart ... 48

MISCELLANEOUS

Automotive News Family Album ... 51-58
Capital Invested in Industry ... 48
Cartoons ... 8
Chronological History of Car Makers ... 12
Farm Income from Sales, 1934-1937 ... 46
Farm Car Distribution ... 46
Financing New, Used Cars ... 94
General Motors, Factory Sales to Dealers, Divisions, 1929-1937 ... 84
General Motors, Factory Sales, Total ... 84
Pneumatic Casings, Tubes, Solids ... 68
Retailing Analysis ... 84-88
Review of 1937 ... 7
Selling Trends ... 84-88
Vital Statistics ... 9
Who's Who, Beginning ... 16

PRINTED IN U.S.A.
SATURDAY NIGHT PRESS, INCORPORATED, DETROIT, MICHIGAN

We can help you SELL MORE CARS AND TRUCKS in this rich farm market!

Advertisements that go *outside* the city limits are the ones that are helping make more sales for dealers and manufacturers in Michigan, Ohio and Pennsylvania. Farm income is above the "good" years of 1935 and 1936. Confident of continued income, due to excellent crops, farmers in these states are buying cars and trucks *now*. Their purchases have formed the bulk of new car sales in many communities during 1938. They will continue to buy in 1939 — sales will go to those manufacturers who *ask* them for the business.

The one sure way to make certain that your advertisements tap the buying power outside the city limits in these states is to use Michigan Farmer, The Ohio Farmer, and Pennsylvania Farmer. These are the *only* publications that can give you the uniform, complete coverage needed to deliver your sales messages to this rich buying audience most effectively, at lowest cost. They are the *only* media you need use to get effective coverage.

Ask your Capper Farm Press representative for complete information about the high buying power in rural Michigan, Ohio and Pennsylvania. It will pay you to ask these farm families to buy your products *now*.

Why MICHIGAN FARMER, THE OHIO FARMER, AND PENNSYLVANIA FARMER ARE "MUSTS" ON YOUR FARM PAPER LIST:

High buying power

These *three* states account for *one-tenth* of the total farm income — assuring you of a rich, responsive market that will yield profitable sales from your advertising.

High car and truck ownership

These *three* states have over 12 per cent of all the farm-owned passenger cars and 13.5 per cent of all the farm-owned motor trucks in the United States. This combination of high buying power and high ownership assures a continuing fertile field for sales.

Steady Income

Highly diversified crops and livestock result in a steady income for farmers in these three states. Steady income, in turn, means steady, year-'round sales and *sales that stay made*.

Michigan Farmer
Detroit

PENNSYLVANIA FARMER
Pittsburgh

The OHIO FARMER
Cleveland

U. S. ROYAL MASTER

America's Largest Selling De Luxe Safety Device

OFFERS THE CAR DEALERS OF AMERICA

1939's BIGGEST PLUS PROFIT OPPORTUNITY

- **New all-time high in change-over sales now being made by car dealers.**
- **Outstanding de luxe equipment profit maker of the generation.**
- **Change-over plan tailor-made for car dealers—no stock investment . . . no added overhead.**
- **Nation-wide public acceptance as the world's foremost safety tire.**
- **Unrivalled for quick stopping safety and outstanding mileage.**
- **A non-competitive specialty any car salesman can take in stride.**

United States Rubber Company

Investigate now. Ask for names of dealers handling your line of cars. See the substantial extra profits they are making with Royal Masters. U. S. TIRE DEALERS CORPORATION, 1790 Broadway, New York, N.Y. 5725 Telegraph Road, Los Angeles, California.